

Modern packaging



Nominated for *Packaging's Hall of Fame*® Story on Page 100

November 1952

still grease proof..

COPOLYMER EMULSIONS of Polyvinyl Acetate give better greaseproof coatings — at no extra cost! Greaseproofness of these coatings exceeds that of rigid government specification JAN-B-121. They last longer. You get greater permanence than with presently used materials, better resistance and flexibility. They're cleaner looking.

**You also get these advantages
in the coating operation:**

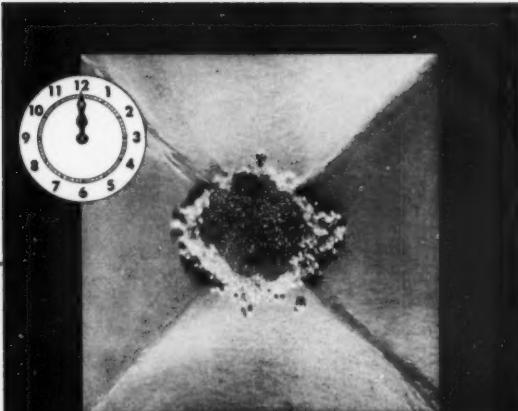
- No fire hazard
- Equipment is easily cleaned
- Uniform viscosity permits easy machining
- Standard drying equipment can be used

APPLICATIONS: Cartons for baked goods — doughnuts, rolls, cakes . . . Machine part wrappings . . . Paper plates . . . Meat packages . . . Greaseproof laminant for foil, glassine . . . Heat seal greaseproof coating — eliminates adhesive cost in making greaseproof pouches, cartons, etc.

For full information, clip and mail the coupon.

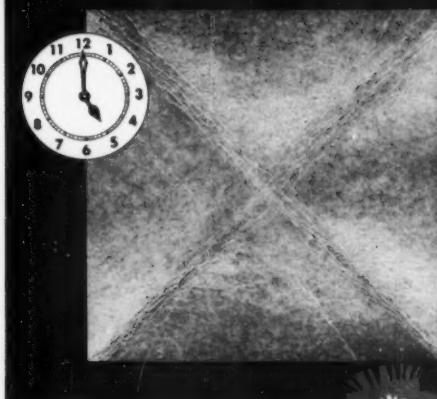
RESYNS®
National
ADHESIVES

270 Madison Avenue, New York 16, N. Y.



Top photo shows coated chipboard which has been given a double diagonal 180° crease on a reverse fold at 1 psi pressure, then treated with a test solution of turpentine and an oil-soluble red dye indicator.

Lower photo shows reverse side of board, still greaseproof after 5 hours.



5 hours later



I'D LIKE TO INCREASE GREASEPROOFNESS

Please send technical data on National's
POLYVINYL ACETATE COPOLYMER EMULSIONS

MP

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

GAIR FOIL Cartons...

create a style trend in smart Packaging!

Products displayed in Gair Foil Cartons are irresistible...a definite stimulation for increasing sales. These brilliant, fascinating foil cartons are doubling and even tripling sales of various products in self-service super markets, syndicate stores, department stores and other important retail outlets.

Yes...Gair Foil Cartons are rapidly gaining a style leadership in the Folding Carton Industry.

Write for Brochure on Gair Cartons



GAIR

PAPERBOARD
FOLDING CARTONS
SHIPPING CONTAINERS

ROBERT GAIR COMPANY, INC. • 155 EAST 44TH STREET • NEW YORK • TORONTO

NOVEMBER 1952

Modern packaging

Vol. 26

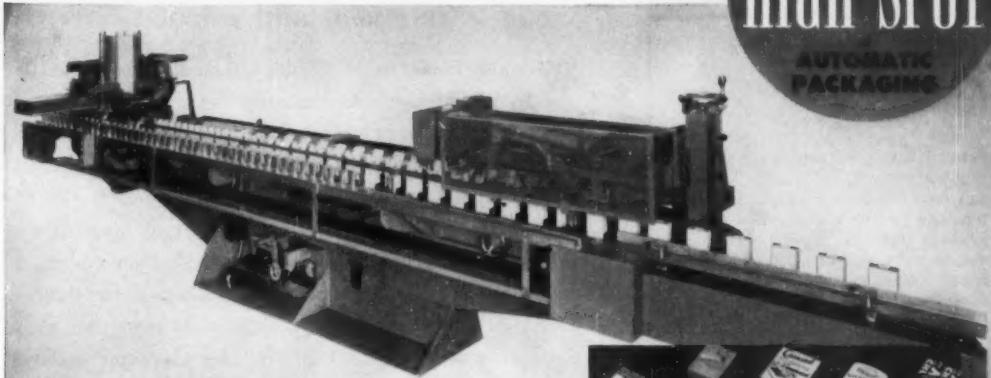
No. 3

November 1952

General

Frozen foods in cans	85	Packaging Pageant	120
Discovery that consumers can be trusted to distinguish fresh-frozen from processed foods is pushing a growing trend.		New decorating idea for squeeze bottles . . . six-bar candy overwrap . . . gift-wrapped hammers . . . other packages of the month.	
Counter-and-stacker	91	Swedish design	124
Machine attachment delivers tea bags counted in pockets, ready for loading in carton.		Good use is made of their quality board in folding boxes designed for hand packaging.	
Elsie Daisy	92	Pre-packaged furniture	127
Bright yellow daisy gives Borden's a strong identifying symbol.		Maker of chrome dinette sets finds that packaging lowers costs, boosts sales and puts furniture in the gift class.	
Taylor's wines	94	Display Gallery	128
Ancient wine-making art is projected into sales through modern art of packaging.		Sealtest's floor merchandiser patterned after milk carton . . . fluorescent-printed liquor display . . . other point-of-sale aids.	
Honors for MODERN PACKAGING	99	Millions in yogurt	130
American Institute of Graphic Arts awards MODERN PACKAGING a Certificate of Excellence for its 25th anniversary issue.		Dannon made the product suit the package, broadened its market and now does a business of \$1,500,000 a year.	
Listerine	100	A new Laura Secord	132
This month's nominee to <i>Packaging's Hall of Fame</i> , the largest-selling oral antiseptic, led the way to the development of reliable, branded, honestly labeled, packaged drugs.		Canadian candy firm's first package-design change in 39 years.	
The little cosmetic package	106	Technical	
This year's holiday collection indicates a trend to smaller cosmetic gift packages.		Evaluation of heat-seal adhesives	135
Free-motion display	108	Laboratory procedures and apparatus for determining sealing range are described. By HAROLD WITTCOFF and DWIGHT PEERMAN.	
A modern art form—the mobile aerial sculpture—becomes a powerful point-of-sale tool.		Economical use of fibreboard	141
Design Histories	110	Study of master shipping containers for pre-packaged tomatoes illustrates possibilities. By BEULAH C. ROBERTSON and WILLIAM A. ARONOW.	
Housewares in Pliofilm . . . five-color laminated foil bread wrap . . . aspirin in laminated film-foil pouch . . . other new ideas.		Questions and Answers	144
The old-fashioned look	114	Departments	
Hand-made look achieved by latest color-printing techniques, high-speed wrappers.		Equipment and materials	146
Tell-tale De-Moist	116	Plants and people	162
Spring scale in hanger of new can weighs moisture pick-up and shows red when it's time to rejuvenate the household desiccant.		Manufacturers' literature	169
Industrial award winners	118	For your information	182
Selecting best shipping packages in seven categories highlights seventh annual industrial packagers' meeting.		U. S. patents digest	188

FOR FAST PRODUCTION WITH A MULTIPLE-ITEM LINE...
OR WHERE CARTON SIZES VARY WIDELY...



REDINGTON Type 9L VERTICAL CARTONING MACHINE GIVES YOU STRAIGHT-LINE OPERATION

When you must make frequent changes for different items or varying package sizes, the highly flexible REDINGTON Type 9L helps you keep production at profitably high levels. Change-overs are easily made. Versatile 9L handles packages from as short as $2\frac{5}{16}$ ", all the way up to as long as 8". Here's the simple 9L operation:

Articles to be cartoned are fed in on machine's intake belt. Machine feeds collapsed carton from magazine, expands it, and closes bottom flap; then carries carton, with open end up, to loading position. Operator manually places article in open carton. Machine automatically closes by tucking top end flaps.

REDINGTON Type 9L gives you *all* the advantages of both performance-efficiency and long-life construction. A few of its features: 1) Straight-line operation; articles enter at left, complete packages come out at right—no kinks, no loops, no U-turns in your production line. 2) Intake belt for fast, convenient handling of articles. 3) The expertly engineered design details and sturdy construction which put all REDINGTON machines in a class by themselves.

For regular cartoning of lines with many items or varying carton sizes . . . or for stand-by service on special merchandising combinations, sample packaging, introductory sizes, or other packages impractical for fully automatic handling . . . REDINGTON Type 9L will keep your production up, your costs down. Particularly attractive for low equipment budgets.



A FEW 9L USERS . . .

Bristol-Myers Co. • Chas. Pfizer & Co. Inc. •
Lederle Laboratories • Whitall Pharmaceutical Co.
• Grove Laboratories, Inc. • Certified Extracts
• The Norwich Pharmaceutical Co. • C. H. Stuart &
Co. Inc.



SEND
FOR THIS
COMPLETE CATALOG

32 illustrated pages of information about the many REDINGTON standard and special machines for AUTOMATIC PACKAGING of everything from Codfish to Razor Blades. Write to the address below . . . or to our Eastern office—Room 828A, 342 Madison Ave., New York 17.

REDINGTON

AUTOMATIC MACHINES for
CARTONING . . . WRAPPING
SPECIAL PACKAGING

— Since 1898 —

F. B. REDINGTON CO., 110-112 S. SANGAMON ST., CHICAGO 7, ILL.

Modern packaging

President and Publisher
CHARLES A. BRESKIN

Editor
LLOYD STOUFFER

PEARL HAGENS, *Managing Editor*
C. A. SOUTHWICK, JR., *Technical Editor*
GLADYS TARRAGANO, *Associate Editor*
WILLIAM C. SIMMS, *Associate Editor*
STANLEY DALY, JR., *Associate Editor*
VAL WRIGHT, *Midwest Editor (Chicago)*
FLORENCE GETTER, *Reader Service Editor*
DONALD R. RUTHER, *Art Director*
H. A. LEVEY, *Patents*

Advisory Editor
C. W. BROWNE

•
BUSINESS STAFF

ALAN S. COLE, *V. P. and General Manager*
P. H. BACKSTROM **M. A. OLSEN**
B. W. GUSSOW **S. S. SIEGEL**
Chicago: **J. M. CONNORS**, *Manager*
 W. F. KENNEDY
Cleveland: **R. C. BEGGS**
Los Angeles: **JAMES C. GALLOWAY**
London, England: **L. H. DOLARO**
DANIEL M. BROADS, *Production Manager*
B. J. FARINA, *Asst. Production Mgr.*
LYNN B. KAHN, *Production*
PHILLIP W. MULLER, *Asst. General Mgr.*
H. FRIEDMAN, *Promotion Manager*
ROBERT BIRNBAUM, *Circulation Mgr.*
T. B. BRESKIN, *Assistant to the Publisher*

•
EXECUTIVE AND EDITORIAL OFFICES:
575 Madison Ave., New York 22; Telephone
—Plaza 9-2710.

BRANCH OFFICES. Chicago, 101 E. Ontario St., Chicago 11, Ill. (DElaware 7-0060). Cleveland, 815 Superior Ave., Cleveland 14, Ohio (SUPERior 1-0757). Los Angeles, 816 W. Fifth St., Los Angeles 17, Calif. (MUtual 8335). London, England, L. H. Dolaro, European Advertising Representative; 10, 11 and 12 Broad Street Ave., Blomfield St., London, E. C. 2, England (London Wall 4231).

Modern Packaging published monthly by Modern Packaging Corp., at Emmett St., Bristol, Conn. Subscription \$6 for one year, \$11 for two years, \$15 for three years in United States and Canada; foreign, \$8 one year, \$13 two years, \$17 three years. All foreign subscriptions payable in United States currency or equivalent in foreign currency computed in current exchange by money order or by draft on a New York bank. Price this issue, 75 cents per copy (foreign, \$1). Copyright 1952 by the Modern Packaging Corp. All rights reserved including the right to reproduce this book or portion thereof in any form. Printed in U.S.A. Acceptance under Sec. 34.64 P. L. & R. at Bristol, Conn. Authorized Dec. 21, 1950.

MODERN PACKAGING is regularly
indexed in the *Industrial Arts Index*.

EDITORIAL

Salesmen and science

WE ARE INDEBTED to Clyde Williams, director of the Battelle Memorial Institute, for the rare picture of a research scientist taking off his hat to the salesman and the role that the salesman plays in furthering industrial, and incidentally packaging, research.

That the salesman is a prime motivating force in our economy, making possible the mass-production system, is generally recognized. But, says Mr. Williams in the Battelle *Technical Review*, people who sell are far more than mere distributors of goods. They are the ones who come in direct contact with the distributor or customer. They know what the customer thinks of the package, what he expects of it and how it stacks up against that of the competitor. Their insistence upon improvements that will lead to more sales keeps funds flowing to the research laboratory—and the resulting technological advances are everybody's gain.

"Sales people," says Mr. Williams, "are creative. They, like research people, deal with ideas. Their contacts with customers often lead to ideas for new products and new industrial operations. They make suggestions which spark technical inquiry. . . . They not only encourage research and technical improvement, but agitate for and demand it. Nothing is so effective in persuading a board of directors to take positive action on a proposed program of product research as a sales executive's insistence that it is necessary to meet competition."

The idea that packaging is a committee problem is now firmly implanted, we are happy to say, in all forward-looking packaging companies, large and small. Packaging counsel usually takes in the viewpoints of sales, advertising, production, management, legal and research departments. But the idea of the close interdependence of the salesman on the street and the research scientist in his laboratory is one that we think should be more widely recognized and put to work.

The Editors

ABC



Little kids are big business!

88% of mothers take their children to the super market at least once a week...77% of them buy at the children's request. Bright, eye-catching colors on packages that are easy for the kids to handle, easy to display and easy to remember have great appeal. How does a kids-eye-view of your package stack up? Dobeckmun... will give you a Package Appraisal and tell you how to step up your sales. Call your Dobeckmun man today. The **Dobeckmun** Company, Cleveland 1, Ohio • Berkeley 2, California • Bennington, Vermont



Avon

staples · cartons

SAVES
\$12,000
A YEAR

with International Stapling Machine



\$12,000 saved annually... more than \$43 a working day . . . through the use of an International Retractable Anvil Stapling Machine that permits the closure of corrugated or fibre cartons from the outside after they are filled!

That is what happens at the Chicago Branch of Avon Products Inc., a nationally known manufacturer of cosmetics and toiletries. The story is told by Mr. Melvin S. Davis, the Chicago Branch Manager. Here is what Mr. Davis has to say about the International Retractable Anvil Stapling Machines:

"Two years ago, we installed a portable, pneumatically operated International Stapler for closing

filled cartons of our products. Formerly, it took 32-man-hours to close between 1,500 and 2,000 cartons of varying sizes. With the International Stapler, this operation requires approximately one-fourth of the time.

"Obviously, we are pleased with this equipment, not only from the point of reducing operation costs, but for its general efficiency and ease of operation."

An International Stapler can substantially reduce your packaging cost . . . there are more than 30 different types . . . from 3½ lb. manually operated portable models for odd job closing to big multi-head automatic models for production closing of large cartons. Write for details.

Have you seen the new sound-movie, "Package for Profit"? It explains the principles of the retractable anvil stapling machine . . . and shows the equipment in actual use. Ask about bookings.

a seal of security

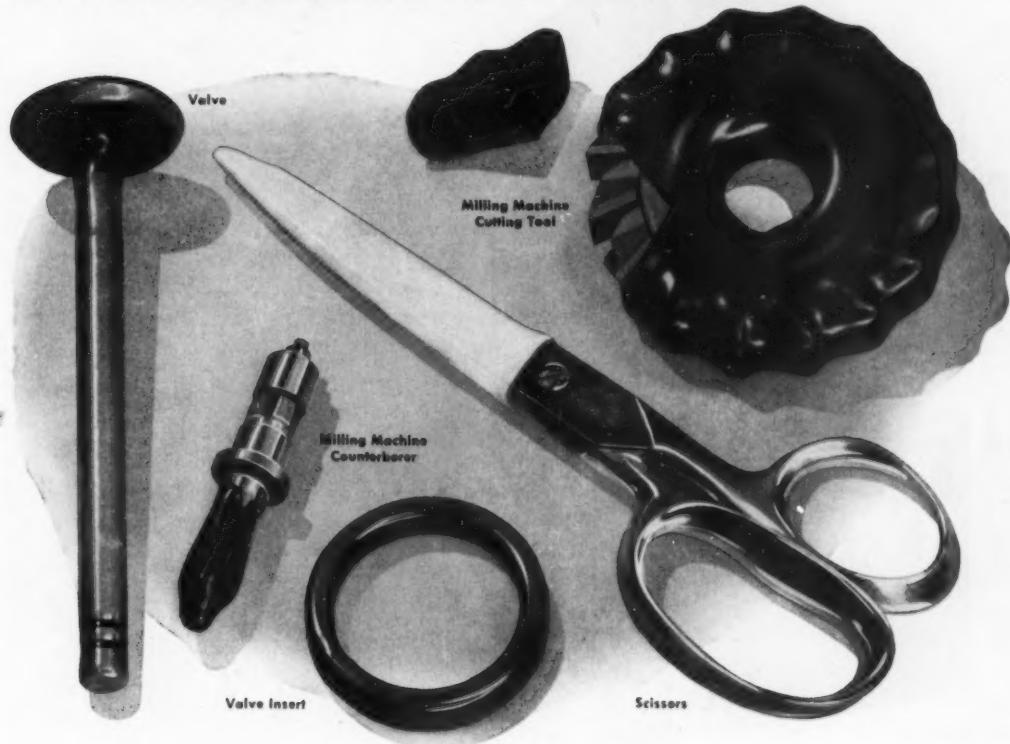


INTERNATIONAL STAPLING MACHINES

International Staple & Machine Company
806 East Herrin Street, Herrin, Illinois

Another new development using

B. F. Goodrich Chemical *raw materials*



DIP AND STRIP "SKIN" does a great protective job

WHAT do you want protected against chemicals, corrosion, oil and gas, tarnish or scratching? Here is a simple operation that does the job at low cost.

All you do is dip the article in Geon-based plastiols, and your protection is good for a long period. It's also good as protective packaging for overseas shipment.

When the article is ready for use you can strip off the skin in one simple operation. Machine parts, valves, tools, medical instruments, automotive parts and utensils can all be

protected by the Geon dip-and-strip skin method.

Plastiols based on Geon paste resin have many uses—and many advantages, too. For they can be made to resist heat and cold, water, weather and abrasion . . . gas, oil and many chemicals. And operations are simpler, because no expensive solvents or recovery systems are needed. There's no fire hazard. Manufacturing costs are reduced. Perhaps one of the versatile Geon materials—resins, latices or compounded plastics—may help you improve or develop more saleable

products. For helpful, technical advice, write Dept. GL-11, B. F. Goodrich Chemical Company, Rose Building, Cleveland 15, Ohio. In Canada: Goodchemco.



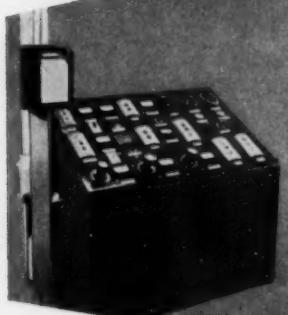
GEON RESINS • GOOD-RITE PLASTICIZERS . . . the ideal team to make products easier, better and more saleable.

GEON polyvinyl materials • HYCAR American rubber • GOOD-RITE chemicals and plasticizers • HARMON organic colors

Egan

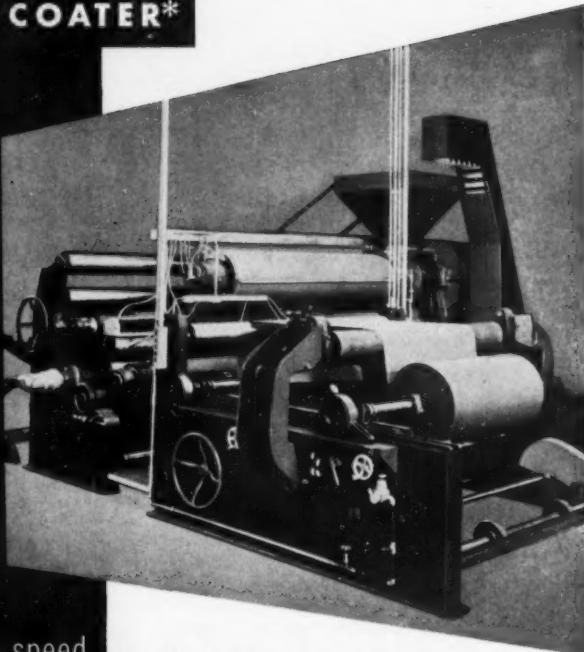
POLYETHYLENE

COATER*



CONTROL PANEL

All controls are mounted in a special operator's control stand with the top panel inclined for ease of viewing and handling. Completely enclosed.



Machine in operation at H. P. SMITH PAPER COMPANY, Chicago, Ill.

high speed
continuous
operation



Send for pamphlets on coating, treating and laminating

FRANK W. EGAN & COMPANY
Bound Brook, New Jersey

Designers and Builders of Machinery
for the Paper Converting and Plastics Industries
Cable Address: "EGANCO"—Bound Brook, N. J.

Another in the series of Frank W. Egan & Company developments and installations, this is the latest Extrusion-type coater for applying polyethylene at speeds up to 1000 FEET PER MINUTE.

The polyethylene is extruded from a die and the extruded film is laminated to the paper between the nip of two rolls.

This coater incorporates automatic splicing unroll and reroll equipment for high speed operation.

*With Patented Features



you get **SPARKLE** plus

outstanding moisture resistance
with packages of

ALCOA ALUMINUM FOIL

Moisture-absorbing products like Nurish Plant Food need *special* protection to assure peak performance.

Used by itself, or laminated to other protective materials, Alcoa Aluminum Foil forms an outstanding moisture-vapor barrier that guards freshness . . . in transit, in storage, on the shelf. And in appearance, nothing outshines the sales appeal of this sparkling wrap.

Alcoa and its converters—the nation's leading packaging producers—are continually developing new ways to package products better . . . in foil and foil laminates. For full information on advantages and applications just call your local Alcoa sales office or write:

ALUMINUM COMPANY OF AMERICA
1760-L Gulf Building • Pittsburgh 19, Pa.



Foil envelope manufactured by Shellmar Products Corp.



"SEE IT NOW" with Edward R. Murrow—CBS-TV
every Sunday... brings the world to your armchair.
Consult your newspaper for local time and channel.

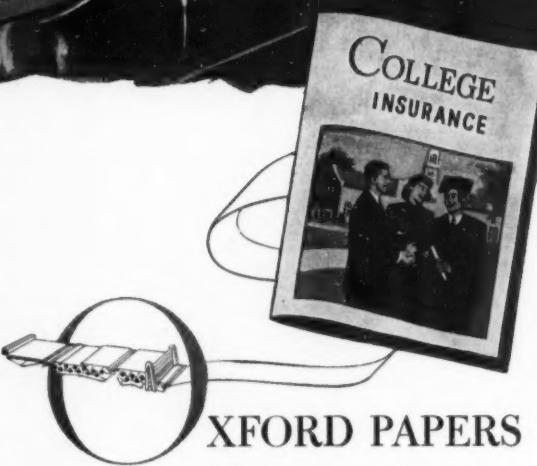
**"It's set—Tom won't worry
about his getting to college"**



In minimizing personal future hazards American insurance companies provide peace of mind for millions of families.

Policies tailored to many specific needs are publicized widely and well, through the printed page—brochures and folders that sell security with pictures and words.

Many successful printed messages of wise family welfare appear on Oxford papers, thus assuring full justice for illustrations—in clean, well-defined reproduction of color, line and screen. Coated and uncoated, the exceedingly wide variety of Oxford grades provides fit foundation for pages that sell.



XFORD PAPERS
Help Build Sales



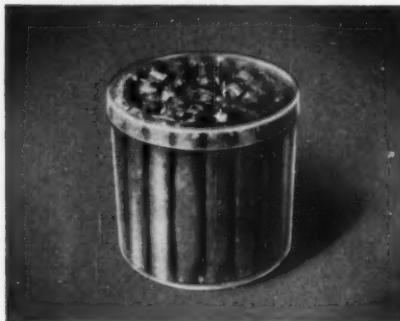
OXFORD PAPER COMPANY, 230 Park Ave., New York 17, N. Y.

OXFORD MIAMI PAPER COMPANY, 35 East Wacker Dr., Chicago 1, Ill.

Mills at Rumford, Maine, and West Carrollton, Ohio

Tri-State

RIGID PLASTIC BOXES



This round Humi-tainer keeps 50 cigars, or a pound of tobacco, in perfect freshness. Makes an attractive humidor that requires no troublesome moistening. Costs no more than a conventional wooden cigar box!



Square Selecto-Pak is an appealing introductory package—a "natural" at gift-giving times. Holds ten cigars comfortably to make a good-looking, attractively-priced gift. Unique hinges are molded right to lid and bottom. Designed (patented) so box cannot be opened from rear when sealed in front. Serves the smoker after cigars are gone in a hundred different ways. Our stock box No. 014— $3\frac{3}{4}$ " x 5" x $1\frac{3}{8}$ ".

Prove...



YOU DON'T NEED AN INDIAN TO SELL CIGARS

Package them in plastic—in Tri-State Rigid Plastic—for a new high in sales appeal. A snug-hugging plastic cover provides humidior-freshness. A gleaming,

crystal-clear transparent surface sells the long, tender leaf wrapper of your product on sight. Or choose a simulated Walnut finish, to get your "Humi-tainer" used on desks and in dens throughout your distribution area.

Many manufacturers, using sales and packaging techniques no less antiquated than the Cigar Store Indian, are missing out on their share of the modern market for just this reason. If you market a Staple Food Item—a Confection—a Perishable Product—Class or Mass Merchandise of any kind—it will pay to investigate our wide range of stock-sized and shaped boxes now. Or we'll mold to your specifications in plastic—the perfect packaging medium for maximum protection and peak point-of-sale appeal. Be "First" in your field—with Plastic.

The best Rigid Plastic Boxes are Injection Molded by



TRI-STATE PLASTIC MOLDING COMPANY

HENDERSON 6, KENTUCKY

New York: 12 E. 41st St. Chicago: 176 W. Adams St. Detroit: 4697 Lakewood
St. Louis: 1089 Francis Pl. Cincinnati: 2664 Queens City Ave.



One great reason why

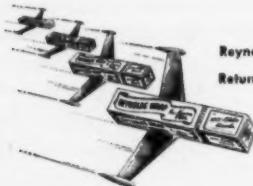
more and more women are demanding
products packaged in aluminum foil.

By superior eye-appeal and product-protection, the preference for foil-packaged products has grown steadily. But until recently many women could not put their finger on *the reason why*. Many of them never knew that all this bright packaging was aluminum foil!

Now, with Reynolds Wrap, the great *reason why* has dawned upon millions of housewives. Now they know it's aluminum foil that keeps their favorite cereals and cookies crisp, keeps their butter and margarine and cheese at full flavor, keeps dried fruits at just-packed perfection...and dehydrated soups, yeast, candy, cigarettes, chewing gum...a long and evergrowing list of products. It's aluminum foil...the same material as their own wonderful Reynolds Wrap, the original and genuine.

Now the eye-attraction of foil has greater sales power because it's *backed by conviction*. Brand preferences become stronger because women know foil keeps their favorite brand best. So the demand for foil-packaged products grows ever more insistent.

Let Reynolds extensive design staff and technical service help you take advantage of this sales power. Call on the leaders in foil packaging! Reynolds Metals Company, General Sales Office, Louisville 1, Kentucky.



Reynolds Wrap is Back
Return Flight as Guaranteed!



Pioneers of
"Progress in
Aluminum Foil
Packaging"

REYNOLDS ALUMINUM

REYNOLDS WRAP

Pure Aluminum
FOIL

1001 Kitchen
Miracles



YOU
CAN
PROFIT,
TOO!

millions of packages are selling faster with

CALMAR DISPENSERS

First introduced in 1949, Calmar Dispensers are increasing sales for 108 manufacturers. In just three years, volume has mushroomed 40 times larger than the initial order from three customers. Consistent reorders from all customers prove that products sell better with Calmar Dispensers.

The functional beauty of colorful Calmar Sprayers, Atomizers, and Dispensers offers consumer appeal and unlimited merchandising opportunity for amazingly low cost.

Why not take a new look at your package? In practically every case, a Calmar closure will satisfy your requirements perfectly. Or let us custom design the solution to your individual needs.

Write for the illustrated Calmar Catalog Price List. It may suggest an immediate way to increase your sales.

CALMAR COMPANY

6800 MCKINLEY AVENUE • LOS ANGELES 1, CALIFORNIA

You may be overlooking increased profits. Here are some of the types of products now consistently reordering colorful Calmar.



SPRAYERS

Glass Cleaners
Residual Insecticides
Room Deodorant
White Sidewall Cleaners
Hair Set Lotions
Moth Sprays



ATOMIZERS

Colognes
Perfumes
Brillantine
Hair Sprays
Flower Colors
Anti-perspirants



DISPENSERS

Hand Lotions
Liquid Soaps
Hair Tonics
Syrup Concentrates
Shampoos
Baby Lotions

Packaging Specification -- Barrier, Moisture-vapor, Flexible

For military packaging

Meets Army, Navy and
Air Force Specifications.

Samples and technical
brochure on request.

FLEXIKIN

ACME BACKING CORP.

Brooklyn 6, New York

Big Advance in Cushioned Packaging!

"SPEED-RAP"

The corrugated board
with the wider kraft liner
... now in rolls!



Two or three handy rolls of "Speed-Rap" in standard widths take the place of large inventories of cut-to-size sheets.

Space saving "Speed-Rap" rolls can be mounted beneath the work table and cut to length as needed. A simple metal former opens the paper flaps automatically . . . readies "Speed-Rap" for immediate use.

"Speed-Rap" won't knock holes in your packaging budget. It actually saves you money; helps you make neater, less bulky packages . . . faster.

CUSTOM LAMINATING AND COATING

We combine plastics, fabrics, foils and paper for functional and decorative purposes, including heat-sealing foil, jar cap liner stock, electrical insulation, aluminum foil and paper or board, and other made-to-order products.

MILITARY PACKAGING MATERIALS

We manufacture a complete line of barrier materials which protect products from damage from handling and the elements. These materials are made to comply with a wide range of government packaging specifications.



THE FLOYD A. HOLES CO.

BEDFORD, OHIO

SALES OFFICES

BOSTON, CHICAGO, CINCINNATI, DECATUR, GA.,
DENVER, DETROIT, FT. WORTH, LOS ANGELES,
NEW YORK, KANSAS CITY, PHILADELPHIA.



MILLS PLASTIC Bottles shape up to build product sales

CUSTOM BOTTLES—Give free play to your imagination in planning the use of custom shaped **MILLS-PLASTIC** BOTTLES for your products. By combining our engineering and molding skill with our exclusive patented process, we can produce bottles in a surprisingly wide variety of shapes and sizes—and in virtually endless colors. We also make closures and atomizers designed to meet your special needs.

STANDARD BOTTLES—Feather-light Polyethylene standard bottles are available in two styles: Mills "Cylinder" in 2-4-6-8 ounces; Mills "Oblong" in 2-4 ounces. Both of these standard styles are available in natural Polyethylene or in your preferred color. Atomizers, closures and tubing are also available in standard styles and sizes.

Let us or our sales agent show you how we can create product selling bottles for you today.

Manufactured under Patents No. 2,515,093—2,597,390—
2,579,399. Other patents pending.

ELMER E. MILLS CORPORATION
2930 NORTH ASHLAND AVENUE • CHICAGO 13, ILLINOIS

Sales agent for the United States: **W. BRAUN & CO., CHICAGO:** 300 N. Canal St. • **NEW YORK:** 715 Fifth Ave.
DETROIT: 139 W. Maple, Birmingham, Mich. • **ST. PAUL:** 2109 Village Lane



REAL COMPETITION MEANS PLENTY OF ACTION *Heekin Customers Like It-*

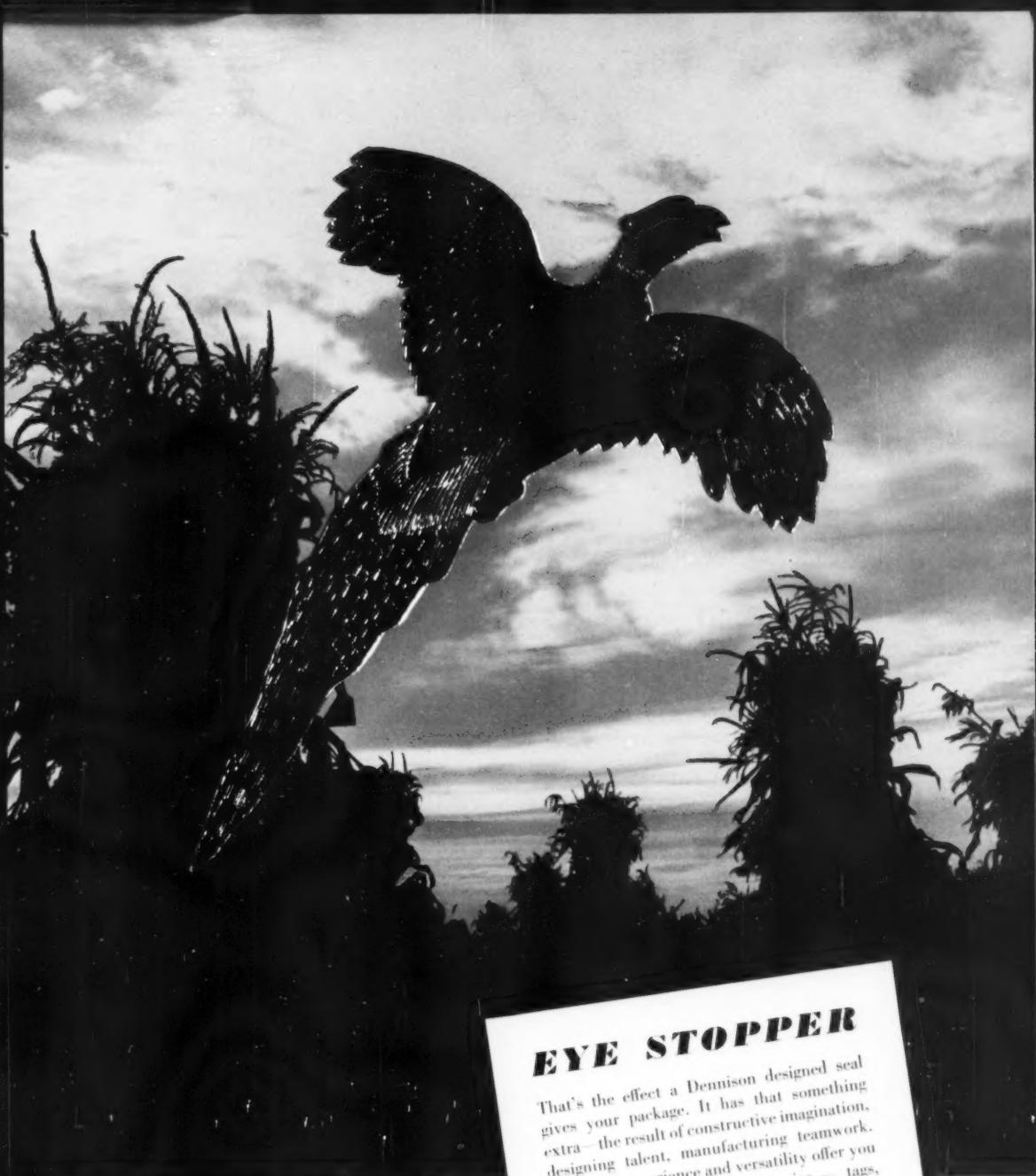
THE kind of action you like is the action that moves your product right off the shelf . . . again and again . . . order after order. Heekin Lithographed Cans . . . backed by more than 50 years of experience in packaging successful items . . . sell your product and protect your product. Today, your package must be "sharp" . . . to gain new customers, to keep the old customers . . . to get action. If you want action — just ask Heekin.



HEEKIN Lithographed CANS

THE HEEKIN CAN CO.,

PLANTS AT CINCINNATI & NORWOOD, OHIO; CHESTNUT HILL, TENNESSEE; SPRINGDALE, ARKANSAS



Dennison

PAPER PRODUCTS FOR MORE THAN A CENTURY

EYE STOPPER

That's the effect a Dennison designed seal gives your package. It has that something extra—the result of constructive imagination, designing talent, manufacturing teamwork. Dennison experience and versatility offer you the finest in packaging accessories—tags, seals, wraps, bands, labels, merchandise cards, set-up boxes. For samples and suggestions appropriate to your product, call nearest Dennison sales office or write Dennison Manufacturing Co., Framingham, Mass.



**FINE PENS
DESERVE
FINE PACKAGING**

PARKER QUALITY, long established and long recognized, is affirmed by the rich brown and gold Dennison-designed boxes that help sell these famous pens and pencils. The individual Pen Box displays the "51" Pen against a background of pastel rayon acetate. The larger Set Box, designed to hold two pieces, forms an ingenious ready-made display.

Packages like these tell the customer, "*This is good*". They inspire respect for the product — and a desire to buy. The result is written in the sales records of Dennison customers.

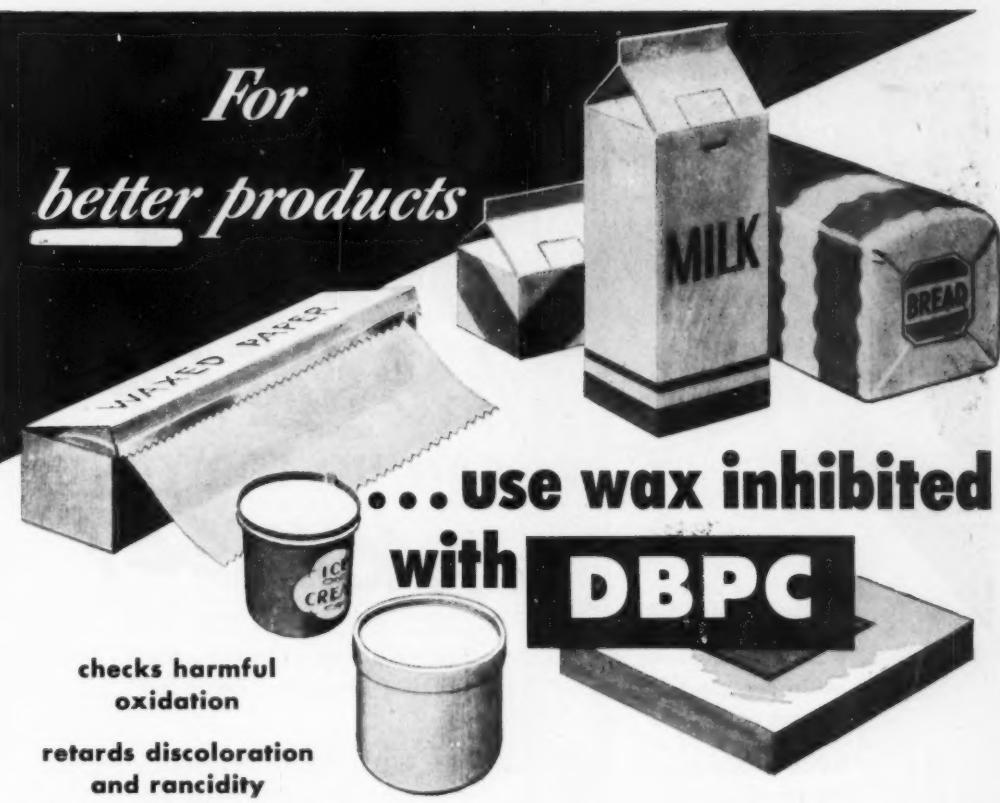
Dennison has designing talent and complete facilities to help you package *your* product, large or

small . . . with careful consideration of your needs, and a healthy respect for your budget!

Call the nearest Dennison office or write Dennison Manufacturing Company, Box Division, Marlboro, Massachusetts.

LOOK TO
Dennison
FOR PACKAGING THAT REFLECTS
THE PERSONALITY OF YOUR PRODUCT

*For
better products*



...use wax inhibited
with **DBPC**

**checks harmful
oxidation**

**retards discoloration
and rancidity**

inhibits odor formation

ONE of the problems of waxed paper and paper board manufacturers is the oxidation of wax. Oxidation causes discoloration and unpleasant odors. In certain specialty waxed papers it can also mean loss of tensile strength and a lowered melting point.

Oxidation is accelerated by prolonged high temperatures in the wax bath. When coating with certain wax blends, however, high temperatures are necessary.

DBPC has been found to be ideal for inhibiting oxidation in wax. Fractional percentages (0.01-0.05%) greatly increase the life of paraffin wax even when it is subjected to temperatures as high as 300°F.

Di-tertiary-butyl-para-cresol (DBPC) is a tri-alkylated phenol which is insoluble in water and aqueous alkali of any strength. Because of its unique chemical structure, DBPC, unlike most phenol derivatives, is practically non-toxic. It is odorless and tasteless.

Tests show that DBPC is a practical and economical antioxidant for waxes. It has also been used with success as an antioxidant in rubber, fatty acids, lubricating oils, grease, transformer oil, turbine oil, gasoline, and jet fuels, among others.

For detailed technical information concerning DBPC, return this coupon.



KOPPERS COMPANY, INC.
Chemical Division, Dept. MP-11
Koppers Building, Pittsburgh 19, Pa.

Koppers Company, Inc.
Dept. MP-11, Pittsburgh 19, Pa.

Please send me a free copy of your Technical Bulletin
on Koppers DBPC.

Name.....

Company.....

Street.....

City..... State.....



SEE what this paper CAN DO FOR YOUR PACKAGE!

- For sparkling color effects, greater sales appeal, you won't find a finer base paper than Nibroc White... particularly if your product is packaged in a bag or sack.
- Nibroc White is an exceptionally tough, highly flexible sheet with a fine printing surface especially for all-over printing. It gives better protection—greater wet strength—is more pliable—more durable—helps make products more salable!
- For more than 50 years we have been developing outstanding papers like Nibroc White—papers engineered to meet a wide variety of packaging needs. Papers that handle better, print better, speed processing, reduce costs!
- Our Technical Service people will be glad to work with you to get a paper "tailored" to *your* specific needs—paper that will do the job better, faster, more economically. Write Dept. DR-11, Boston.

*Sold only to converters

PAPER helps the PACKAGE make the SALE

BROWN



COMPANY, Berlin, New Hampshire

CORPORATION, La Tuque, Quebec

General Sales Offices: 150 Causeway St., Boston 14, Mass.—Dominion Square Bldg., Montreal, Quebec

SOLKA & CELLATE PULPS • SOLKA-FLOC • NIBROC PAPERS • NIBROC TOWELS • NIBROC KOWTOWLS
BERMICO SEWER PIPE, CONDUIT & CORES • ONCO INSOLES • CHEMICALS

Answers to sticky questions about packaging

From bags to bottles, from books to labels, adhesives are an important part of numerous packages. But regardless of the application, you'll find a Monsanto plasticizer to exactly fit your needs for hot-melt, tacky, nontoxic or heat-sensitive adhesives.

Especially suited for modern adhesives, these plasticizers are used in scores of formulations. Polyvinyl acetate, zein, casein, polyvinyl butyral, styrene, ethyl cellulose and vinylidene chloride . . . any of these types of adhesives can use Monsanto plasticizers.

For information, contact your nearest Monsanto Sales Office or MONSANTO CHEMICAL COMPANY, Organic Chemicals Division, 800 North Twelfth Blvd., St. Louis 1, Missouri.

DISTRICT SALES OFFICES: Birmingham, Boston, Charlotte, Chicago, Cincinnati, Cleveland, Detroit, Houston, Los Angeles, New York, Philadelphia, Portland, Ore., San Francisco, Seattle, Twin Cities. In Canada, Monsanto Canada Limited, Montreal.

Santizers—
many
sticky
advantages

Santizers—
many
sticky
advantages

Santizers—
many
sticky
advantages

MONSANTO PLASTICIZERS FOR QUALITY ADHESIVES

For Tacky Adhesives:

Ortho-Nitrobiphenyl
Dimethyl Phthalate
Dibutyl Phthalate
Santicizer* 160
Santolite® MHP
Santolite MS (80%)
Tricresyl Phosphate
Triphenyl Phosphate

For Heat-Sensitive Adhesives:

Diphenyl Phthalate
Santicizer 1-H
Santicizer 3
Santicizer 9

For Hot-Melt Adhesives:

Dibutyl Phthalate
Santicizer 160
Santicizer 8
Santicizer M-17

For Nontoxic Adhesives:

Santicizer 141
Santicizer B-16
Santicizer E-15

*Reg. U. S. Pat. Off.

PLASTICIZERS





*A pickle in the middle
and WEBER'S
on Top!*

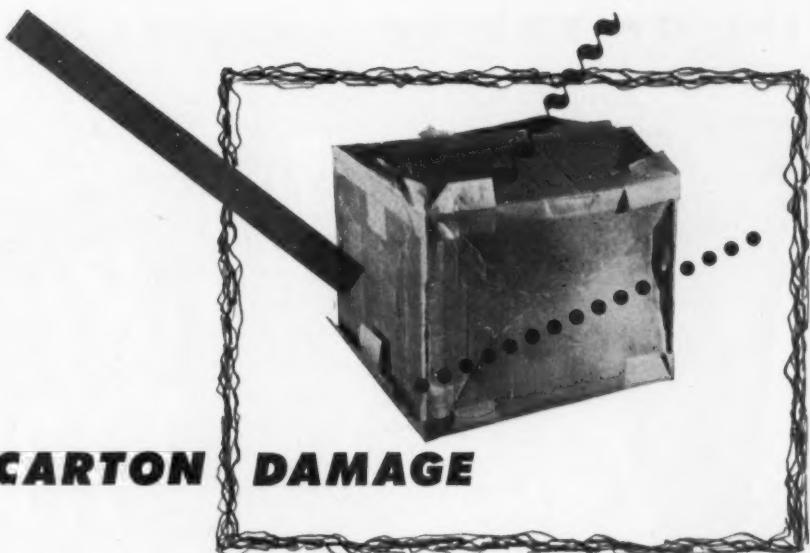
Here is a cue to an exceptionally tasty sandwich . . . Weber's Horse Radish Mustard.* It gives you two sparkling flavors in one seasoning . . . and when "the pickle in the middle" is Weber's too . . . you're all set for some fine eating.

Weber's Horse Radish Mustard is sealed with a Crown Lug Cap and specially selected liner. This is the closure that is so very popular with housewives because of its easy removal and perfect re-sealing over and over again. It's a favorite with packers everywhere, too. Get your Crown Closure Representative to show you the advantages Crown Lug Caps have for you. Crown Cork & Seal Company, Baltimore 3, Maryland. *World's Largest Makers of Metal Closures.*

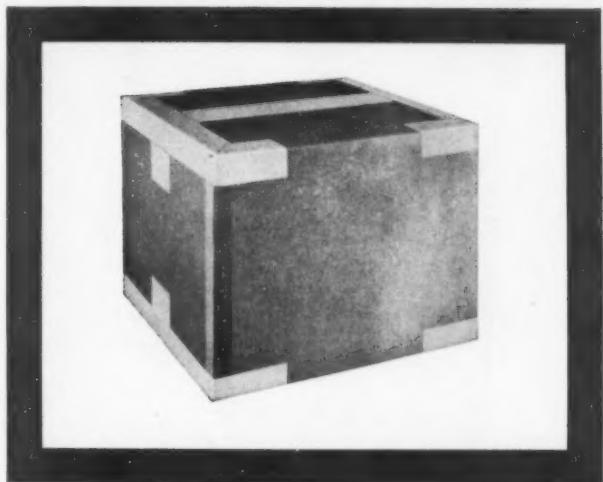


* WEBER'S HORSE RADISH MUSTARD is packed by Heintz & Weber Co., Buffalo, New York.

CROWN CLOSURES
Approved by Millions of Housewives



AVOID CARTON DAMAGE



**USE TROJAN
IMPERIAL
standard gummed tape**



The carton above had a *very* rough trip, as you can see. You can avoid gummed tape failure and protect the contents of your cartons by using Trojan Imperial gummed tape. Properly applied, it holds permanently, even under the most rugged shipping conditions. This outstanding tape, packaged in corrugated cartons, is a product of one of America's oldest and most progressive gumming plants. Next time ask your paper merchant for Trojan Imperial gummed tape.

THE GUMMED PRODUCTS COMPANY

Offices • **TROY, OHIO** • Mills Atlanta • Chicago • Cincinnati
Cleveland • Los Angeles • New York • Philadelphia • San Francisco • St. Louis

IPI OFFERS TO ANILINE PRINTERS



GEMGLO *high-gloss*

- New IPI Gemglo inks make surface printing equal reverse printing on cellophane
- Excellent sparkle
- Brilliant colors
- High gloss
- Print sharp, clean
- 100% pigmented
- Formulations for all types of cellophane—including MST
- Also used for glassine—often without overprint varnish.

AQUALOX *water-base*

- New IPI Aqualox water-base inks are fast drying
- Have good rub-resistance
- Full color range
- Excellent moisture-resistance
- Print clean, sharp
- Run exceptionally well on bag formers, etc.
- Ideal for sulphite, kraft and similar stocks—in some cases, can be run on glassine.

Ask your IPI salesman for full information on the new IPI Gemglo and Aqualox inks for aniline and Anilox type presses.

IPI, IC, Anilox, Aqualox and Gemglo are trademarks of Interchemical Corporation



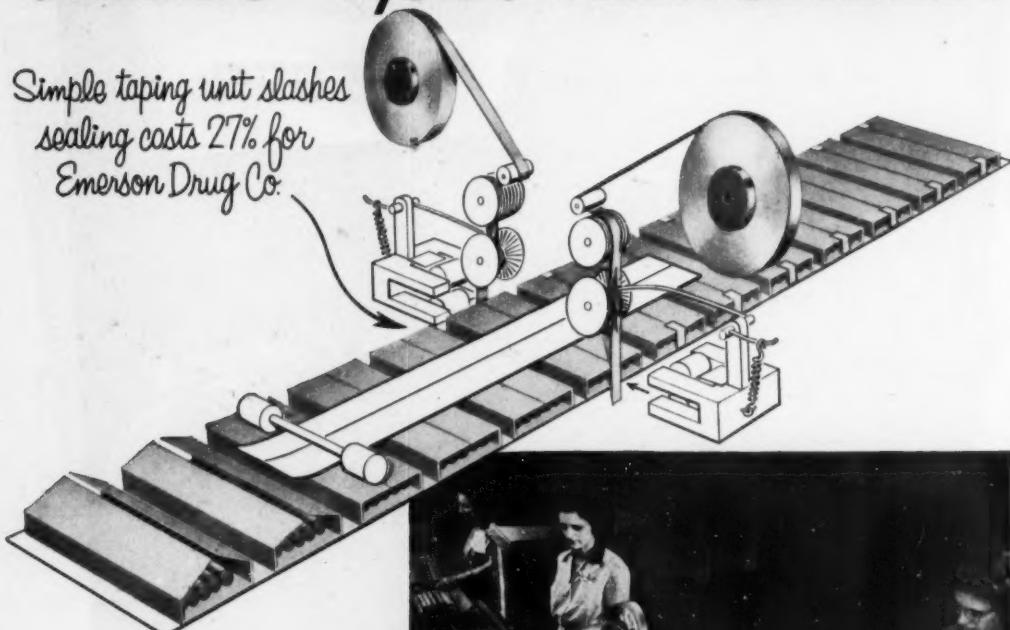
INTERCHEMICAL CORPORATION

PRINTING INK DIVISION • 67 West 44th Street, New York 36, New York

RELY ON IPI FOR LEADERSHIP IN INK RESEARCH

SAVES \$7,500 ANNUALLY!

Simple taping unit slashes
sealing costs 27% for
Emerson Drug Co.



Each of the tape-sealed containers shown above encloses a display card holding 12 dose-sized tubes of Bromo-Seltzer. Sealing of the protective fibreboard cover was formerly done manually. By switching to this automatic taping unit, Emerson Drug Co. made a saving of about \$31.50 daily . . . an estimated yearly saving of \$7,560!

The taping mechanism automatically seals each end of the carton with a 3 1/4-inch length of "Scotch" Brand Paper Tape, protecting the display cards during shipment. The tape holds firmly en route, yet is removed by the dealer with just a flick of a finger.



3M ENGINEERS worked with Toolcraft, Inc., of Baltimore in designing this special unit for Emerson Drug. New methods of banding, sealing, coding, reinforcing are cutting packaging costs in plants all over the country. Let these trained 3M Service Representatives show you how the more than 200 "Scotch" Brand tapes simplify packaging jobs. Write Dept. MP-112, 3M Company, St. Paul 6, Minn., and a representative will call promptly.



The term "Scotch" and the plaid design are registered trademarks for the more than 200 pressure-sensitive adhesive tapes made in U.S.A. by Minnesota Mining & Mfg. Co., St. Paul 6, Minn.—also makers of "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: 122 E. 42nd St., New York 17, N. Y. In Canada: London, Ont., Can.

*Tape does it
quicker, better,
cheaper!*



Adjuvant...

"Helping . . . Helpful . . . An Assistant" —

As defined by Webster, ADJUVANT in designing and producing unusual and interesting packaging is an apt description of . . .



WARNERCRAFT®

Finest Name in Packaging

THE WARNER BROTHERS COMPANY

BRIDGEPORT 1, CONNECTICUT

New York Sales Office: 200 Madison Avenue, New York 16, N. Y.

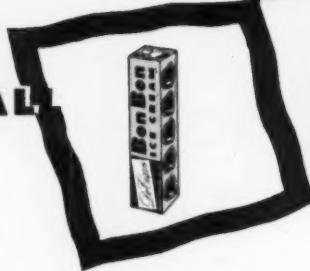
Boston Sales Office: Little Building — Room 553, Boston 16, Mass.

FOLDING CARTONS—HAND MADE OR MACHINE MADE SETUP BOXES

TRANSPARENT ACETATE BOXES—COUNTER DISPLAY BOXES

NO CARTON TOO LARGE

OR
TOO SMALL



ACM CARTONS!

A new new name . . . a new product . . . and a new carton "precision produced" by ACM . . . for another National merchandising leader!

Jumbo cartons—for display—are more and more becoming a "must" in merchandising and marketing plans. ACM jumbo cartons "billboard" your consumer carton to the buying public, and are a definite aid in swinging the decision in your favor at the point of purchase.

The American Coating Mills Corporation offer their "no cost to you" service, and will gladly send a representative to counsel with you on the design—or redesign—of your carton.



AMERICAN COATING MILLS CORPORATION
ACM CARTONS

Subsidiary of Robert Geir Company, Inc.
General Offices: Board of Trade Bldg., Chicago 4, Illinois
Offices in Principal Cities

The Modern Food Container!



Heat-Sealable

VISKON®
nonwoven fabrics

... is finding wide success as an individual coffee bag due to its many fine features

VISKON IS ECONOMICAL!

Gives top performance where a "breather" type package is required—at little cost.

VISKON IS HEAT-SEALABLE!

Generally, VISKON seals at between 350° and 500°F, corresponding with dwell time and jaw pressure.

VISKON IS STRONG, DURABLE!

Holds its shape, yet is soft and flexible. Has exceptionally high *wet strength*.

VISKON IS TASTELESS!

It's non-toxic, completely sanitary for use as a food container. Lint-free and non-raveling.

VISKON® nonwoven fabrics

—another product to fit today's needs by

THE VISKON CORPORATION
NORTH LITTLE ROCK, ARKANSAS

VISKON nonwoven fabrics offer a new product for packaging where porosity, product breathing, absorption, diffusion, infusion and *wet strength* are needed. VISKON opens up new and better ways to present your product to the consumer. Already VISKON has proven a success in coffee packaging. VISKON is suitable for packaging of tea, dried food, spices, etc.

VISKON is made of rayon and cotton fibers bonded with cellulose . . . can be safely used in connection with foods. It is non-toxic, tasteless, odor-free, lintless and completely sanitary.

VISKON is available in mill rolls, tapes or sheets—in a wide variety of weights and grades of either cotton or rayon fabric. Investigate VISKON today for your food packaging problems. Mail handy coupon below for additional information and samples . . . do it today!

THE VISKON CORPORATION, Dept. ME
Box 72, North Little Rock, Arkansas.

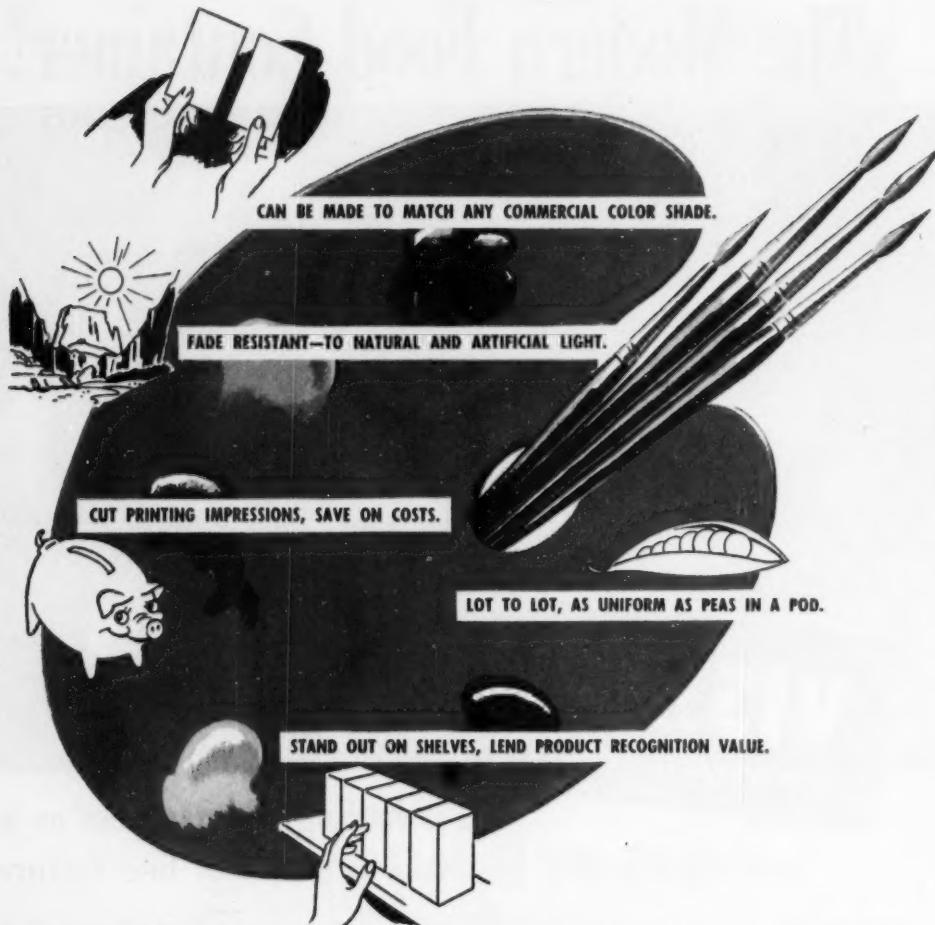
Name

Position

Company

Address

City Zone State



Ridgelo Color Cartons Do Double Duty!



FOR FINE FOLDING CARTONS

They help increase sales . . . they help reduce costs. This combination of advantages, added to the custom-made quality standards of Ridgelo clay-coated box-board, is unique. For those reasons many leading manufacturers of many varied products, find Ridgelo has mighty interesting answers to their product packaging problems. Perhaps we can help you . . . ask us.

Representatives

H. B. Royce, Detroit
 Philip Rudolph & Son, Inc., Philadelphia
 A. E. Kellogg, St. Louis
 Norman A. Buist, Los Angeles

MADE AT RIDGEFIELD, N. J. BY LOWE PAPER COMPANY



this is the "standard" for thanksgiving

... families reunited around the dinner table . . . old acquaintances renewed . . . and the time when all Americans give thanks for the countless blessings and great heritage that are theirs.

This is the "standard" for package printing

This colorful cellophane wrapper expertly printed by Standard provides clean, sanitary protection for men's handkerchiefs . . . does its full share in attracting impulse sales.



Standard
printing company

Subsidiary of Shellmar Products Corporation
COLUMBUS, GEORGIA

PRINTERS OF CELLOPHANE, ACETATE

GLASSINE SINCE 1936

You get the right answer

Cellophane:

Problem: to give cookies sparkling display . . . extra moistureproof protection for freshness; good durability, and a strong heat-seal. **Answer:** Du Pont 450 K202 Cellophane.



Polythene Film:



Problem: Many produce items need a film that has extra strength, and stays tough and flexible even in contact with water or ice. **Answer:** bags of Du Pont Polythene.

Acetate Film:



Problem: to give high-luster display to packages of stationery . . . and to insure the dimensional stability of the package, maintaining quality appearance of the product. **Answer:** Du Pont Acetate Film.

to your packaging problem

with DU PONT's complete packaging service

To help you get the packaging films exactly suited to the needs of your products, Du Pont offers 115 varieties of three basic films—Cellophane, Polythene and Acetate. *Plus* the experience of over 25 years in meeting the packaging requirements of thousands of different products.

Working with Du Pont's experienced specialists, you get the answers to the vital question of selecting the right films—whatever your products may require. Whether it's moistureproof protection, or water-vapor transmission. Whether dimensional stability, or conformability to irregular shapes. Whether tough flexibility at low temperatures, or brilliant luster.

And you can turn to Du Pont for help with every question of package construction . . . or consumer reaction to different types of packaging. Get in touch with your Du Pont representative. Talk over your problem with him. Or write: E. I. du Pont de Nemours & Co. (Inc.), Film Department, Wilmington 98, Delaware.

Only Du Pont gives you all these packaging aids:

1. **WIDE VARIETY OF PACKAGING FILMS** scientifically tailored to meet the needs of varied products and packages.
2. **TECHNICAL** assistance to help you plan the most practical and efficient construction of your package.
3. **MERCHANDISING** help through continuing nationwide surveys of buying habits, to keep your package up to date.
4. **NATIONAL ADVERTISING** to continually strengthen consumer preference for your packaged products.

DU PONT PACKAGING FILMS

CELLOPHANE

POLYTHENE • ACETATE



150th ANNIVERSARY
Better Things for Better Living
...through Chemistry

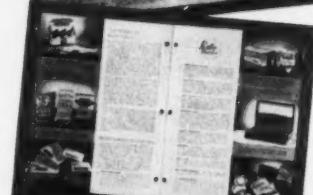
WHEN *Split Second*
PACKAGING IS ESSENTIAL...



USE *Paisley*
RESIN ADHESIVES



GET IT
NOW!



Think of having at YOUR command, stable *laboratory controlled*, prepared Liquid Resin Adhesives that *set in split seconds*... timed to match machine motions with exacting mechanical precision! They will give you an entirely new conception of speed and efficiency in any packaging, labeling, sealing, fabricating or manufacturing operation.

All users of Resin Adhesives need the new Paisley Resin Adhesive Bulletin No. 23. It will give you practical, *usable* information never before available to Resin Adhesive users. Valuable technical aspects are explained in language any layman can understand. No cost or obligation is involved. Be sure to use your company letterhead when writing for your copy.

TEAR OUT... FASTEN TO LETTERHEAD AND MAIL TODAY!

PAISLEY PRODUCTS INC., 1770 Canalport Ave., Chicago 16, Ill.

Gentlemen: Without obligation, please send me the new Paisley Technical Service Bulletin No. 23.

We have a special Gluing problem. Send us your Adhesive Operation Data Sheet. (You fill in and return to us for Laboratory recommendation.)

FIRM _____ BUYER _____

STREET _____ CITY _____ STATE _____

PAISLEY PRODUCTS INCORPORATED
Division of MORNINGSTAR, NICOL, INC.

1770 CANALPORT AVENUE, CHICAGO 16, ILLINOIS * 630 WEST 51st STREET, NEW YORK 19, NEW YORK
SALES OFFICES IN TWENTY-FIVE PRINCIPAL CITIES

Manufacturers of Glues, Pastes, Resin Adhesives, Cements and related Chemical Products

CENTRAL STATES' NEW

SHOWBAG* DUET

SHOWS TWO... SELLS TWO!

Patent
Appl'd. For

*T. M. REG.



Would you like to increase sales by selling multiple units or companion items?

The SHOWBAG DUET is a "two-in-one" transparent plastic bag that increases the size of the unit sale and moves related merchandise. Ideal for foods and drugs, household products, clothing accessories, notions and many other products.

SHOWBAG DUETS are available in any size, plain or beautifully printed. Write for samples and prices.

Every Industry Profits From Packaging By

CENTRAL STATES PAPER & BAG CO.
5221 Natural Bridge

St. Louis 15, Mo.

Plants in: St. Louis • Beacon, N.Y. • Salt Lake City • Auburn, Wash. • Sales Representatives in all Principal Cities

they don't call
us speedy
for nuthin'!

Meeting and beating emergency
deliveries is nothing unusual for us—
just part of our everyday production.
That's why our growing list
of customers includes
a name like **Mason**.

**industrial
packaging co., inc.**

Manufacturers of Folding Paper Boxes

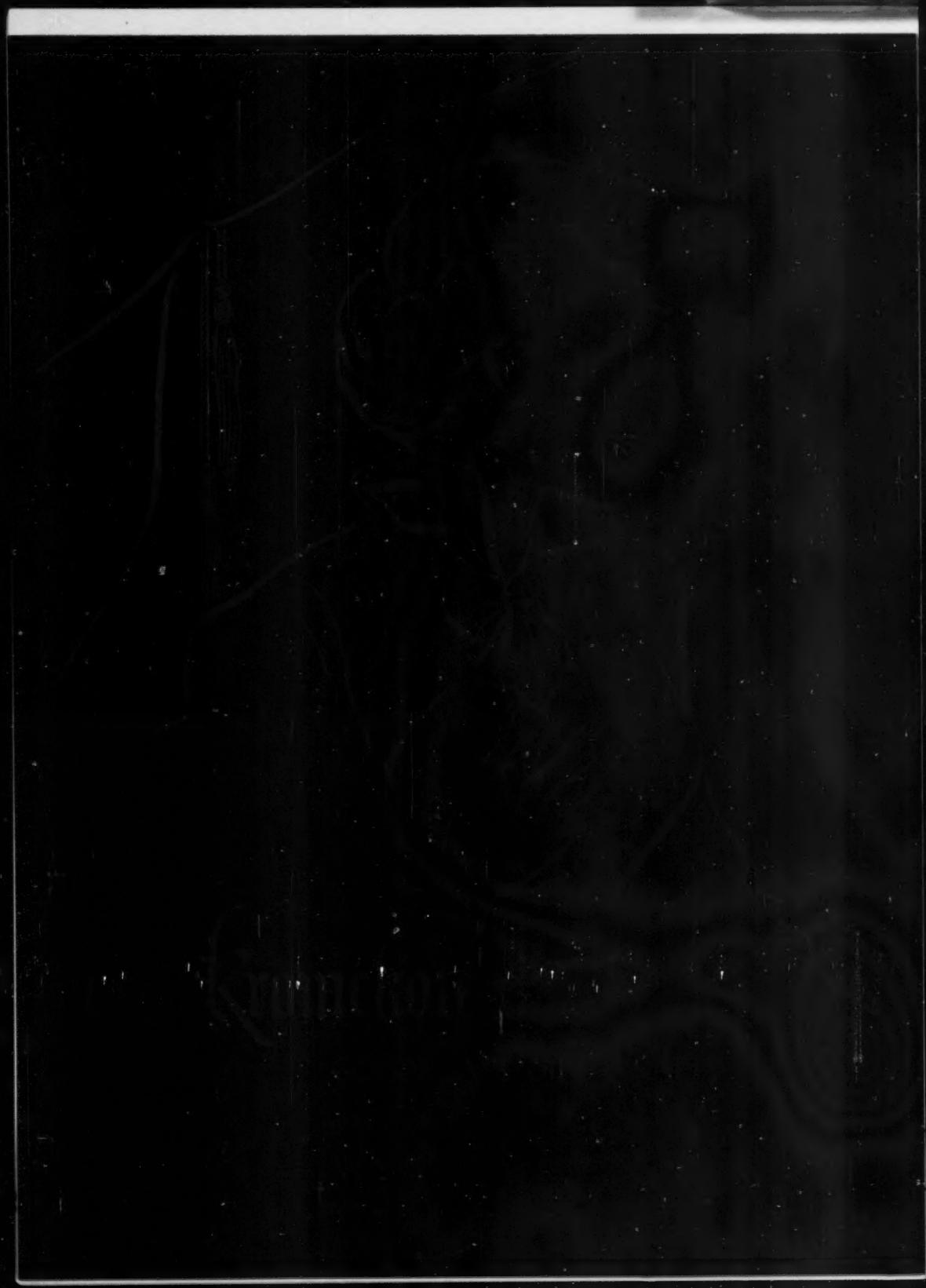
1155 Manhattan Avenue

Brooklyn 22, New York

EVergreen 9-5560











*The Inside Story
of
Paper Box Production*



PRODUCTION INFORMATION at our finger tips

To record the progress of millions of boxes, from raw materials to finished product, through the Miller plant . . . to keep that amount of production on the move . . . to insure delivery to customers on schedule . . . to assure accuracy of specifications established to fit specific needs—all this brings into play such non-boxmaking equipment as shown above. For it is not only the quality of the boxes, and their rightness for the job to be performed, but the *service* that goes with them, that keeps Miller customers sold.

Have you thought about *your* boxes lately? Their dual job, of course, is *protection* and *identification*. Have they been examined critically as to current performance in these respects? If you'd like to talk boxes with a man whose whole business is boxes, just mail us the coupon. Without obligation, naturally; your Miller representative enjoys "talking shop."



**Walter P. Miller Co., Inc.
452 York Ave., Phila. 23, Pa.**

We'll be glad to talk packaging with your representative, with the understanding that no obligation is involved. Better have him call up ahead of time for an appointment.

Name.....

Firm Name.....

Address..... Telephone.....

City..... Zone..... State.....





MILK WAGON, 1870 (Scale Model) MUSEUM OF THE CITY OF NEW YORK

It's just a museum piece . . . fortunately!

There aren't many people today who can remember when milk was delivered by farm wagons and dipped from large cans into pitchers brought out to the drivers by housewives.

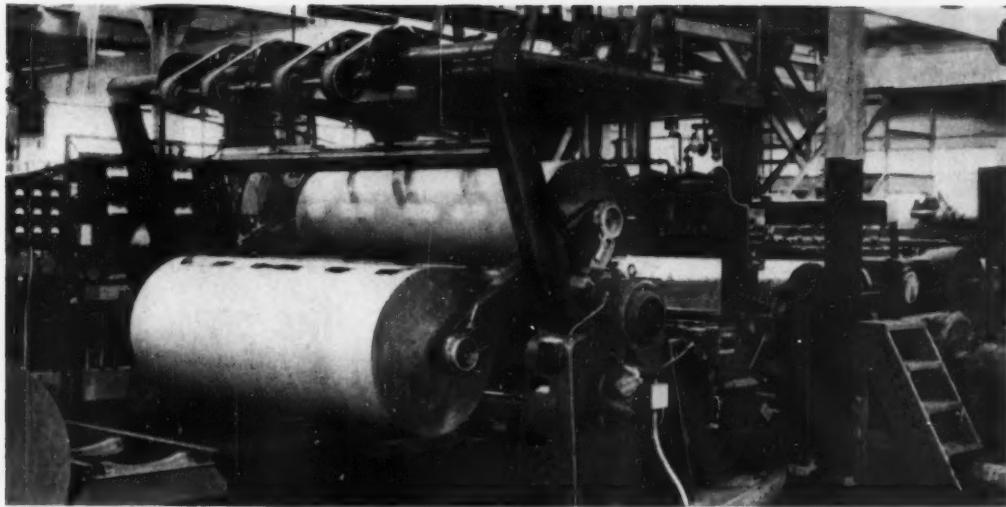
The modern disposable milk container, shown below, is a far cry from the old "open pail" delivery of years ago. This new container is easy to carry, easy to pour, and easy to store. Its greatest protection lies in the fact that it is used only once, by you, and then thrown away!

This modern, protective container was pioneered and developed by the American Can Company. It demonstrates another example of Canco's ability to design and produce *special* containers for *special* products!

Canco, one of the most versatile manufacturers in the packaging field, has over half a century of knowledge and skill to call upon in meeting the problems of its customers.



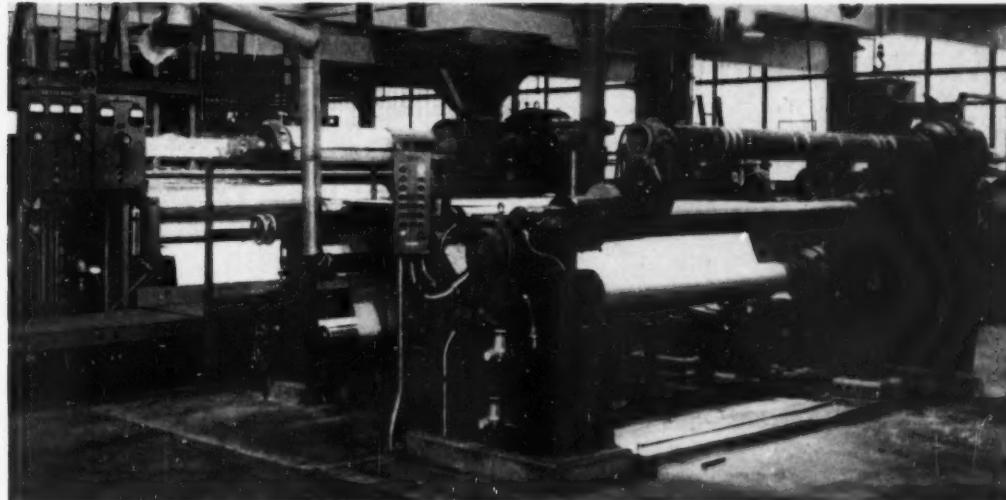
CONTAINERS - to help people live better



Continuous Unwinding to extruder

Polyethylene Laminated to Paper Without Stops for Roll Changes

Extruder-Laminator at St. Regis Paper Co., Carthage, N. Y. Employing Kohler System reels; the operation is continuous. Write for DOM-8 for details.

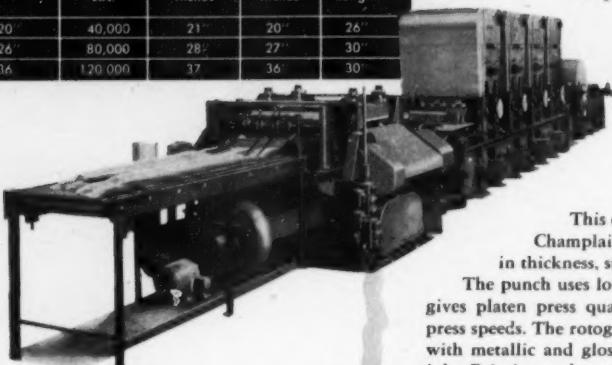


Continuous Winding after lamination

Dilts manufactures complete Polyethylene Laminator for continuous operation.



Model	Maximum Pressure Lbs.	Maximum Web Width Inches	Maximum Die Width Inches	Maximum Die Length
20"	40,000	21"	20"	26"
26"	80,000	28"	27"	30"
36"	120,000	37"	36"	30"



**Top quality printing...
top quality cartons...**

**Once through
the press!**

This one operation rotary carton press by Champlain handles roll stock up to 28 points in thickness, steps up production as much as 50%.

The punch uses low cost steel rule and furniture dies, gives platen press quality scores at better than cylinder press speeds. The rotogravure press can coat, varnish, print with metallic and gloss inks as well as standard gravure inks. Printing and cutting registration is provided by electric push button control — or automatic registration at high speeds can be provided by Champlain electric eye control. Write today for complete information on top quality printing, cutting, automatic stripping of folding cartons... *once through the press.*

© 7455

SPECIFICATIONS

Sheeter Size	Max. width of sheet	Max. length	Min. length
14"	15"	18"	9"
20"	21"	26"	13"
26"	28"	34"	17"
36"	37"	34"	17"



**sheet delivery Economy
with high speed
Rotogravure advantages**

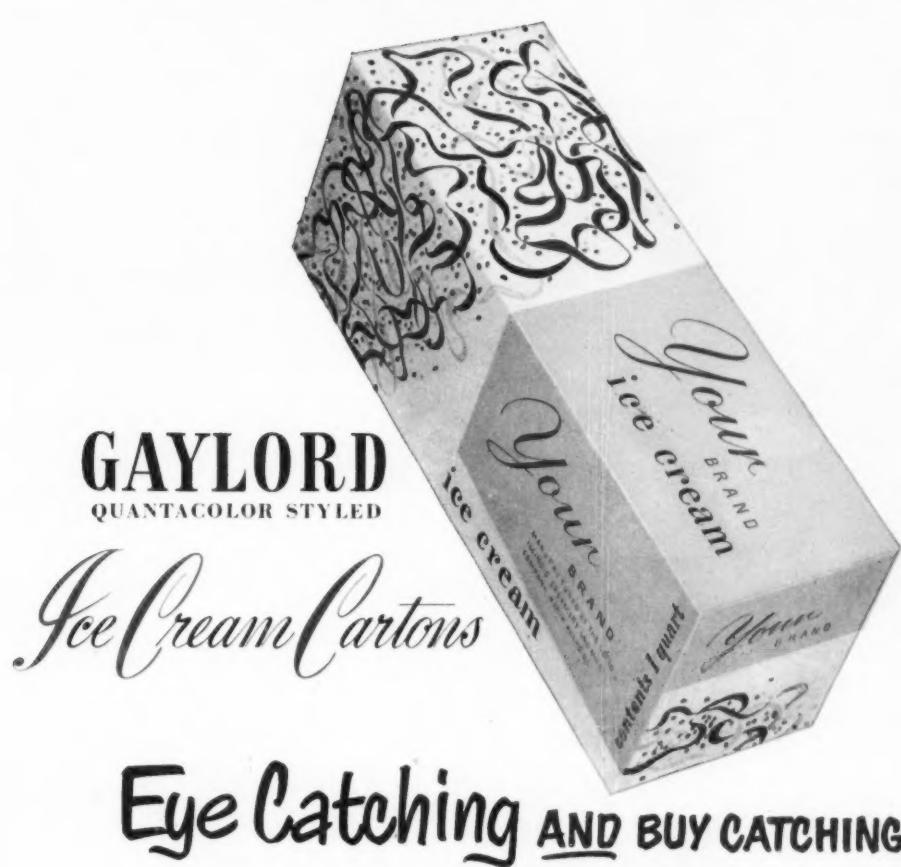
Champlain's Rotogravure Presses and Sheeters deliver instantly dried multicolor sheets two ways: to a slow-moving belt or to an accurately jogged pile delivery by synchronized positive grippers. Stock ranging from glassine to cardboard is accurately cut to $\pm 1/64$ tolerance at speeds up to 18,000 sheets per hour. Easily adjusted cutting mechanism delivers a complete range of sheet sizes. Printing and cut-off register is controlled by a running register mechanism. Automatic-eye control of register is also available with Champlain's Registron. Write for further information.

CHAMPLAIN COMPANY, INC.

88 LLEWELLYN AVENUE, BLOOMFIELD, N. J.
CHICAGO OFFICE: 520 N. MICHIGAN AVE., CHICAGO 2, ILL.

Champlain manufactures a complete line of rotogravure, aniline, rotary letterpress and allied equipment for packaging and specialty printing.

© 7461



GAYLORD QUANTACOLOR STYLED

Ice Cream Cartons

Eye Catching AND BUY CATCHING

Your carton has two jobs to do for you: first, it must attract the shopper's eye, and then, it must follow through with a strong appeal to buy. Both jobs are done dramatically with Gaylord's exclusive QUANTACOLOR designing — to give your product "pick-up" power at the point of purchase.

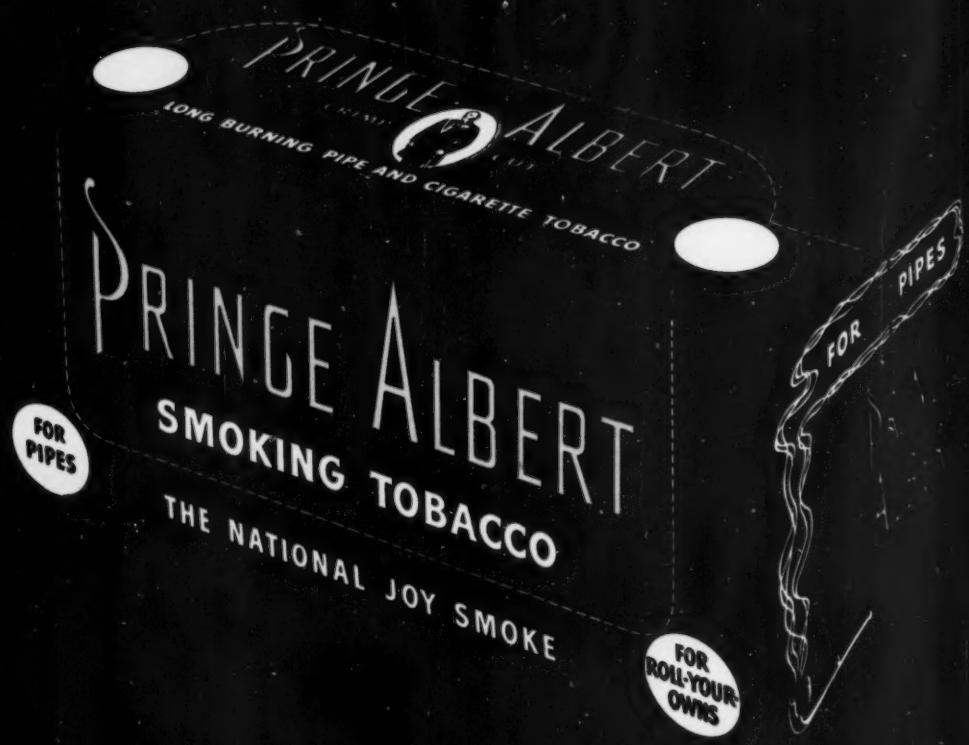


Investigate the sales stimulating power of Gaylord QUANTACOLOR in:

- beer cartons — 6 and 12 can carriers
- gift packages for liquor
- frozen food boxes
- small parts and appliance cartons
- toy and novelty boxes
- flower and plant cartons
- folding carton counter displays
- ... and many others.

GAYLORD CONTAINER CORPORATION

General Offices: ST. LOUIS • Branches: New York • Chicago • San Francisco • Atlanta • New Orleans • Jersey City • Indianapolis • Los Angeles Seattle • Houston • Oakland • Minneapolis • Detroit • Columbus • Fort Worth • Tampa • Dallas • St. Louis • Cincinnati • Des Moines Oklahoma City • Portland • Greenville • San Antonio • Memphis • Kansas City • Bogalusa • Chattanooga • Milwaukee • Wiesaco • New Haven Amarillo • Appleton • Hickory • Sumter • Greensboro • Jackson • Miami • Omaha • Mobile • Philadelphia • Little Rock • Charlotte • Cleveland
FOLDING CARTONS • CORRUGATED AND SOLID FIBRE BOXES • KRAFT BAGS AND SACKS • KRAFT PAPER AND SPECIALTIES



From the *Gardner* Gallery of famous American Packages

An Attitude

... THE UNSEEN INGREDIENT

Actually, it *can* be seen. Look closely at any product that has become an American buy-word—and you'll see more than the physical materials of which it is made.

You'll see the attitude of men determined to make and market a superior product. Look closely at any Gardner carton—and you'll see reflected that very same attitude.

Here at Gardner we believe in never being quite satisfied with a good job. We feel an obligation to ourselves—and to our customers—to do even better, tomorrow, what we have gained recognition for doing well today.

We think that's an important reason why you'll find so many of America's most famous products packaged in Gardner cartons.

THE GARDNER BOARD AND CARTON CO.

Manufacturers of Folding Cartons and Boxboards

GENERAL OFFICES: Middletown, Ohio—PLANTS: Middletown, Ohio; Lockland (Cincinnati), Ohio
Sales Offices in Chicago, Cleveland, New York, Philadelphia, Pittsburgh, St. Louis



Cheslene

POLYETHYLENE

Flat Tubing

Gusseted Tubing

Sheeting

with uniformity that safeguards costs

Cheslam

extrusion-lamination
of polyethylene to:

papers
fabrics
foils
other films

WRITE for complete details
about CHESLAM and the
application of this Chester
service to your specific
requirements.

• Wide or narrow—flat or gusseted—CHESLENE tubing is dependable. You get *uniformity* of gauge, width and strength based upon rigid quality control . . . and *full yield—pound for pound*. High speed, fully automatic operation remains profitable without costly breaks or stoppages. Choose CHESLENE for its uniform transparency, printability and heat sealability and you're *sure* of consistent performance . . . month in, month out. We'll gladly furnish you with complete information and list of leading converters of all Chester products.

CHESTER Packaging Products Corp.

284 NEPPERHAN AVENUE • YONKERS 2, N.Y.

New York Office: 295 Madison Avenue, N.Y.C. 17 • LExington 2-5048

OLD DOMINION Offers

Top Design Service



Jean Erwin

One of America's outstanding young designers . . . former faculty member of NYU School of Retailing . . . Miss Erwin blends artistic talent with a practical knowledge of what sells in packaging and display.



E. Vitézey

Schooled at Budapest Academy of Art . . . her work in Hungary and Austria attracted wide attention in the United States where her package designs now combine "old world" flair with "new world" practicability.

● Award-winning design is yours at Old Dominion Box Company . . . the Southern boxmaker with a national reputation. Get the ideas of this top flight design department by selecting Old Dominion for your next set-up box, folding carton, corrugated container, canister, or transparent container.

OLD DOMINION *Box Company Inc.*

PLANTS LOCATED THROUGHOUT THE SOUTH

Executive Offices: LYNCHBURG, VA. • Sales Offices: CHARLOTTE, N.C.

THE SOUTHERN BOX MAKER WITH A NATIONAL REPUTATION

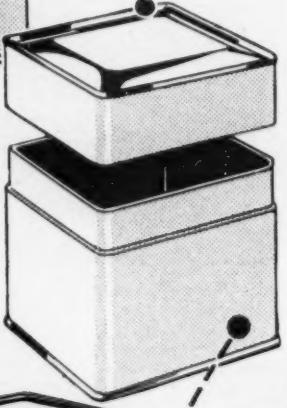


GIFTED IDEA...

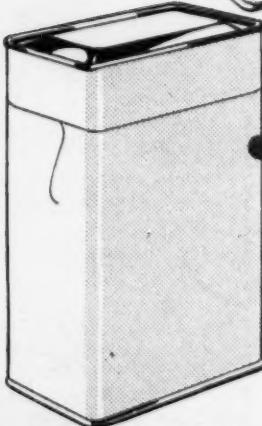
BY *Sefton*

Ingenious string-opening
can...a present for your
product....with a future!

Like playing Santa to your product...when you package it in Sefton's efficient string-opening can! Sizes and shapes galore, especially created for a wide variety of products! Our designers will help you select the one best suited to your product! All are factory-sealed, tamper-proof and easy to open! Available in one-use style or with built-in re-closure! These products all successfully packaged in Sefton's String Opening Can.



MONOSODIUM GLUTAMATE • CHEESE • CANDY
DETERGENTS • PISTON RINGS • TIRE PATCHES • TOYS
FROZEN FOODS • MOTH CRYSTALS • SPICES • FRUIT • TEA
MEDICATED BANDAGES • ICE CREAM • CLEANSER • SPICES



ADHESIVE TAPE • GIFT PRESERVES
VETERINARIAN SUPPLIES

PAPER CANS...
SPIRAL AND CONVOLUTE
PAPER AND METAL ENDS
ROUND AND IRREGULAR SHAPES
TUBES AND HEAVY CORES



Sefton
**FIBRE CAN
COMPANY**

HOME OFFICE
3275 BIG BEND BOULEVARD,
ST. LOUIS 17, MISSOURI

PLANTS: ST. LOUIS • NEW ORLEANS
PORTLAND, ORE. • PIQUA, OHIO
DIVISION OF CONTAINER CORP. OF AMERICA

DISTRICT OFFICES: Atlanta • Boston • Chicago • Denver • Detroit • Los Angeles • Memphis • Nashville • New Orleans
New York • Piqua • Portland • Salt Lake City • St. Paul



THE GOLDEN RETRIEVER inherits his canine intelligence and kindness from sheepherding forebears. The rich, golden, water-resisting coat, his steadiness and willingness to tackle difficult situations, makes the Golden Retriever a wonderful hunting companion admirably suited to severe cold and icy waters.



Dependable Packaging Since 1872

What's a Pedigree to do with Containers?



JUST THIS: Union corrugated boxes have a pedigree going back in an unbroken line to the forests owned or cultivated by Union . . . to Union's huge mills and fabricating plants.

That's why every Union box is uniform. That's why you can be sure every carload shipment will measure up to the same high standards as submitted samples or previous orders.

Minute Maid Corporation values Union's *pedigreed* boxes to be sure its famous Minute Maid frozen orange juice gets there safely. It is one of scores of America's leading manufacturers who pick the winner—the *pedigreed* Union Container.

UNION Corrugated Containers

UNION BAG & Paper Corporation

Principal Offices: WOOLWORTH BLDG., NEW YORK 7, N. Y.

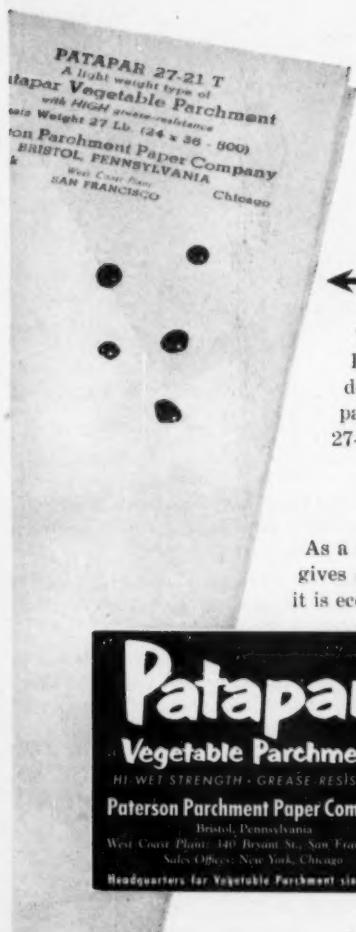
Corrugated Container Plants: SAVANNAH, GEORGIA • CHICAGO, ILLINOIS • TRENTON, NEW JERSEY

NEW GREASE-RESISTING

PATAPAR 27-21T gives

sure PACKAGE PROTECTION

at low cost



Patapar 27-21T is a new type of Patapar Vegetable Parchment that is light in weight (27-lb) and – in addition to wet-strength – *extremely grease-resistant*. In actual commercial use, Patapar 27-21T has shown greater resistance to grease and oil penetration than conventional grease-resisting papers of much heavier weight. It offers improved packaging at lower cost.

← NO GREASE "crawl"

This test will prove it. Place 5 drops of oil on a sheet of Patapar 27-21T. The drops will not increase in size. They do not spread or "crawl." On a conventional grease-resisting paper the oil drops will crawl and spread noticeably. Patapar 27-21T stops grease "crawl" *completely*.

Many important uses

As a wrapper for lard, shortening or margarine Patapar 27-21T gives excellent protection. It stays clean – looks appetizing. And it is economical. Because it resists grease staining, Patapar 27-21T is used also as a package insert for coffee, nuts and other oil bearing products. It is ideal as a protective wrapper for oiled metal parts and leather goods. These are just a few of its many applications.

Send for samples

For samples of Patapar 27-21T and more information, write us today. Tell us the use you may have in mind.

For aniline printing at
its very best...



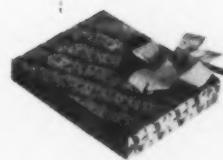
BBD
"Shirt-Sleeve"
Service



BBD inks are your answer to clean, sharp, color-rich printing on any aniline press—with or without metered inking rolls—because BBD specializes in inks for aniline printing. Furthermore, BBD INKS are "tailor-made"

for your special needs to assure maximum color-strength, hiding power, adhesion, flexibility and fade-resistance. BBD ANILINE INKS are available in either pigmented, dyestuff or combination formulations... for any packaging stock.

For more information... or the service of a "shirt-sleeve" aniline ink specialist... contact your nearest BBD office or write direct to Bensing Bros. and Deeney, 3301 Hunting Park Avenue, Philadelphia 29, Pa.



CHOCOLATE



CHOCOLATE



CHOCOLATE



CHOCOLATE



FOIL



on
PLIOFILM
PARCHMENT
SULPHITE
LINERBOARD
and other
packaging materials



Bensing Bros. and Deeney
SALES COMPANY

World's Largest Makers of Aniline Ink

PHILADELPHIA • CHICAGO • WAKEFIELD, MASS.

Pacific Coast: A. M. BOJANOWER, Los Angeles

Export: McLARIN JONES CO., New York

Canada: MANTON BROS., Toronto



setting our caps for smooth performance

As this high-speed Sun Tube machine sends each tube spinning into its cap, it works as delicately as the most sensitive human fingers to screw the caps on precisely hard enough.

Put on a trifle too tightly, caps could easily cause consumer annoyance. Worse, loose caps could mean leaks that impair not only the contents

of the tubes but also the packager's reputation.

In capping, as well as at every other step in tube making, Sun Tube insists on *precision*. That is the only way to assure delivery to our customers of trouble-free tubes...tubes that protect the product perfectly, sparkle with sales appeal, and fill at lowest cost.

SunTube Corporation

HOME OFFICE: 181 LONG AVENUE, HILLSIDE 5, N. J. • TEL. WAVERLY 3-0400
Plants: Hillsdale, N. J.; Washington, N. J.; So. San Francisco, Calif.; Ottawa, Can.; Mexico City, Mex.

Chicago 3, Ill. Sun Tube Corporation, 37 So. Wabash Ave.
St. Louis 1, Mo. Marvin Yates Company, Arcade Building
Cincinnati 8, Ohio Ralph H. Auch, 3449 Custer Road
New Orleans 19, La. R. P. Anderson Co., 925 No. Solomon Pl.
Washington, N. J. Sun Tube Corp., Route #30
Houston 6, Tex. R. P. Anderson Co., 1426 Castle Court
Mexico City, D.F., Mexico . . . Tubos de Estano, Calle 174 Oriente No. 267

St. Paul 1, Minn. Alexander Seymour, 712 Pioneer Bldg.
Dallas 2, Tex. R. P. Anderson Co., 1122 Texas Bank Bldg.
South San Francisco, Calif. Sun Tube Corp., 915 Linden Ave.
Los Angeles, Calif. Sun Tube Corp., Phone: MADison 6-9980
Ottawa, Canada Sun Tube Corp., 145 Spruce St.
Toronto, Canada Sun Tube Corp., 165 Bloor St., East

TOP FLIGHT PACKAGING for TOP FLIGHT MERCHANDISER



FRIENDLY TO EYES, just as Wear-ever Household Aluminum Foil is "friendly to food", this package is actively engaged in helping to move an important Wear-ever Aluminum product across retail counters everywhere. Its friendly influence on buyers is due to a combination of fine design, fine paperboard, fine printing, scoring, and cutting—a natural result of those complete coordinated facilities nationally known as The Ohio Boxboard Company's **PLANNED PACKAGING**.

*Planned
Packaging
MOVES
MERCHANDISE*



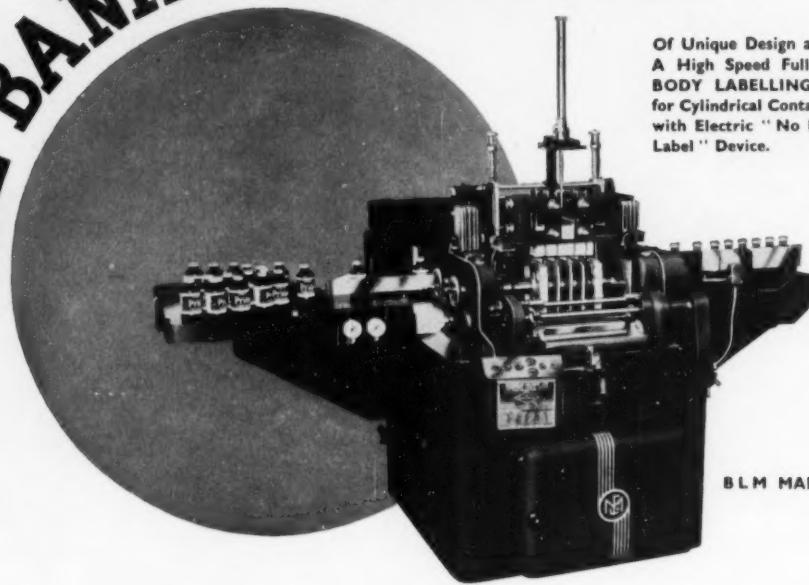
THE OHIO BOXBOARD CO.

"Home of PLANNED PACKAGING"

RITTMAN • OHIO

Manufacturers of paper board, folding boxes, corrugated and fiber shipping containers, and converted specialties.
SALES OFFICES: RITTMAN • AKRON • CUYAHOGA FALLS • CLEVELAND • COLUMBUS • YOUNGSTOWN
CINCINNATI • TOLEDO • MANSFIELD • CANTON • PITTSBURGH • ERIE • NEW YORK • CHICAGO

THE 'BANKS' LABELLER



Of Unique Design and Principle.
A High Speed Fully Automatic
BODY LABELLING MACHINE
for Cylindrical Containers. Fitted
with Electric "No Bottle — No
Label" Device.

BLM MARK 3.



Please write for
descriptive literature

Precision labelling from 2,400—10,200 units per hour using one label stack only.

The "Banks" Labelller is simple to operate, occupies very little space, and positions the labels positively, accurately, and without any trace of surplus gum beyond the edges of the label, irrespective of the label shape or size.

Change from one size of container to another is obtained in a matter of seconds. Cleaning down takes only a few minutes.

Manufactured in 6 models suitable for use in Breweries, Mineral Water, Food, Cosmetic and Chemical Factories, etc.

Each model will label all round or part, up to the label width capacity of the machine, from $\frac{1}{2}$ " up to 12" wide.

B.L.M. Mark 1 will apply a label 3" wide x 4" deep.

B.L.M. Mark 2 will apply a label 4" wide x 6" deep.

B.L.M. Mark 3 will apply a label 12" wide x 6" deep.

All round or back and front or series labels within this area.

Each of these models will accept diameters from $1\frac{1}{4}$ " to $4\frac{1}{2}$ ".

Models B.L.M. Mark 1.5 or 2.5 will accept diameters down to $5\frac{1}{8}$ ".

Over 1,000 machines are at work or on order for THIRTY Countries and 180 Towns and Cities in Great Britain.

Manufactured by Morgan Fairest Ltd. Sheffield. England



STOKE S&S SMITH CO
PACKAGING MACHINERY
Frankfort • Philadelphia 24, U.S.A.

Subsidiary of
Food Machinery and
Chemical Corporation

**HAZEL-ATLAS
GLASS CO.**

Wheeling, W. Va.



Our Chemist . . . Your Sales

Our chemist plays an important part in every technical phase of glass making starting with the original batch.

He knows the chemistry of glass, but as in the case of every H-A specialist he is also vitally interested in your sales problems.

Thus the batch makes good sanitary glass from a manufacturing standpoint,

but it also must make glass at its glistening transparent best.

For our chemist is interested in your products display.

He knows that this display means more sales to you.

All of H-A's personnel and all of H-A's equipment is geared to your sales.





3800 YEARS

That is a long time, isn't it? Wars, famines, tyrants, the rise and fall of empires—much has transpired in this period. The world has progressed from the simple wheel to gigantic machinery . . . from a simple to a complex way of life.

However, to the members of the Seal & Label Institute, these years are not a measure of time, but represent the total years of experience in the designing and producing of seals and labels. Years in which we have progressed from merely "labeling" a product to the latest in style, appeal and "merchandising that sells."

If you have a product that requires a seal and label, why not let us, with our 3800 years of experience, assist you. Contact a member of the SEAL & LABEL INSTITUTE for reliable information, well planned designs and a finished seal or label that will mean more sales—more profits for you.



*Seal of Perfection
—produced from experience*

SEAL & LABEL INSTITUTE

Attleboro Printing &
Embossing Co., Inc.
P.O. Box 120 (54 Union St.)
Attleboro, Mass.
Attleboro 1-0423

Cameo Die & Label Co.
154 West 14th St.
New York 11, N.Y.
Oregon 5-0228

Dennison Mfg. Company
300 Howard St.
Framingham, Mass.
Framingham 3511

Eastman Tag & Label Co.
548 Fourth Street
San Francisco 7, Calif.
Exbrook 2-5102

Ever-Ready Label Corp.
357 Cortlandt St.
Belleville 9, New Jersey
Belleville 2-5500

Fenton Label Company
506-512 Race Street
Philadelphia 6, Pa.
Market 7-1226

Folcraft Printing Corp.
3611-14th Avenue
Brooklyn 18, N.Y.
Gedney 6-4516

The Foxon Company
P.O. Box 1278
(235 West Park St.)
Providence, R.I.
Gaspée 1-2386

Grand Rapids Label Co.
535-549 Ottawa St., N.W.
Grand Rapids, Mich.
Grand Rapids 6-1133

A. Kimball Company
307 West Broadway
New York 13, N.Y.
Canal 6-2300

Paramount Paper Products
Company
4401 North 23rd St.
Omaha 11, Nebraska
Kenwood 6844

The Reyburn Mfg. Co., Inc.
16th St. & Indiana Avenue
Philadelphia 32, Pa.
Radcliff 5-4587

Shuman Labels
600 West Jackson Blvd.
Chicago 6, Illinois
Central 6-8708

Tompkins' Label Service
Frankford Ave. at
Allegheny Ave.
Philadelphia 34, Pa.
Regent 9-1821

Spielman Co., Inc.
161 Leverington St.
Philadelphia 27, Pa.
Ivyridge 3-6100

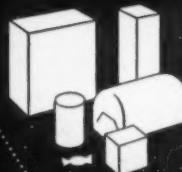
A HALF CENTURY OF SERVICE

NEWARK PACKAGING

SELLS YOUR PRODUCT

PROTECTS YOUR PRODUCT

PROMOTES GOOD WILL



Whether your needs are large or small . . . our half century of know-how . . . our research department . . . our art and engineering staffs . . . are at your service to help solve your packaging problems . . . without obligation.

QUALITY Integrated production—our own paper mill gives Quality Control at the source, which guarantees Uniformity.

- WAXED PAPERS
- LAMINATED ALUMINUM FOIL
- BARRIER MATERIALS
- ROLLS
- SHEETS
- BAGS



NEWARK PARAFFINE & PARCHMENT PAPER CO.

50 JELLIFF AVENUE, NEWARK 8, N. J. • MILLS AT NEWARK, N. J. and PITTSSTON, PA.

CROMWELL PAPERS—paper the Globe!

with distributors throughout the world

There must be a reason why any group of products enjoys a world-wide acceptance. With Cromwell Papers, the reason is Quality. If your need is for highly specialized protective papers . . . for custom-made or machine-made bags . . . for a perfectly tempered tympan . . . write, wire or call for a Cromwell representative to discuss it with you.

CROMWELL PAPER COMPANY

4801-33 South Whipple Street • Chicago 32, Illinois

"Up-to-date supplementary sheets for Cromwell's Handbook of Military Packaging are now available on request"

these
outstanding
distributors
carry
CROMWELL

... special
prepared Tympan

ALABAMA
Birmingham—Strickland Paper Co.
Montgomery—Atkinson Paper Co.
ARKANSAS
Little Rock—Arkansas Paper Co.
ARIZONA
Phoenix—Blake, Moffitt & Towne
Tucson—Blake, Moffitt & Towne
CALIFORNIA
Fresno—Blake, Moffitt & Towne
Los Angeles—Blake, Moffitt & Towne
C. Leland—Blake, Moffitt & Towne
Sacramento—Blake, Moffitt & Towne
CONNECTICUT
New Haven—Rourke-Eno Paper Co.
FLORIDA
Tampa—E. C. Palmer & Co. Ltd.
Miami—E. C. Palmer & Co. Ltd.
Jacksonville—Paper Co.
GEORGIA
Atlanta—Vulcan Paper Corp.
Atlanta—Somerville Seybold
Macon—Dillard Paper Co.
ILLINOIS
Chicago—Birmingham & Prosser
Chicago—Chicago Paper Co.
Chicago—E. W. Butler Paper Co.
Prairie Forest Paper Co.
Decatur—Decorative Paper Co.
Quincy—Irwin Paper Co.
Champaign—Crescent Paper Co.
Springfield—Capital City Paper Co.
INDIANA
 Ft. Wayne—Butler Paper Co.
 Indianapolis—Crescent Paper Co.
 Terre Haute—Mid-States Paper Co.
IOWA
Des Moines—Pratt Paper Co.
Sioux City—Western Newspaper
Union
KANSAS
Wichita—Western Newspaper
Union
KENTUCKY
Louisville—Rowland Paper Co.
LOUISIANA
New Orleans—E. C. Palmer & Co.
Shreveport—Louisiana Paper Co.
MAINE
Augusta—Carter Rice & Co.
MASSACHUSETTS
Boston—Butler Paper Co.
Springfield—Bulky Dutton & Co.
Worcester—Charles A. Esty
Paper Co.
MICHIGAN
Detroit—Union Paper & Twine Co.
Grand Rapids—Central Michigan
Paper Co.
Kalamazoo—Birmingham &
Prosser Co.
MINNESOTA
Duluth—John Barth Paper Co.
Minneapolis—Carpenter Paper Co.
St. Paul—John Leslie Paper Co.
MISSISSIPPI
Meridian—Newell Paper Co.
West Jackson—Jackson Paper Co.
MISSOURI
Kansas City—Birmingham &
Prosser Co.
St. Louis—Butler Paper Co.
St. Louis—Birmingham & Prosser Co.
ONTARIO
Billings—Western Newspaper Union
Buff—Ward Thompson Paper Co.

NEBRASKA
Lincoln—Western Newspaper Union
Omaha—Field Paper Co.
NEW JERSEY
Newark—Central Paper Co.
Trenton—Central Paper Co.
NEW MEXICO
Albuquerque—Butler Paper Co.
NEW YORK
New York—Bulky Dutton & Co.
Buffalo—Ailing & Cory Co.
Rochester—Ailing & Cory Co.
Syracuse—Ailing & Cory Co.
Utica—Ailing & Cory Co.
NORTH CAROLINA
Greensboro—Dillard Paper Co.
SOUTH CAROLINA
Greenville—Dillard Paper Co.
NORTH DAKOTA
Fargo—Western Newspaper Union
OHIO
Cincinnati—Central Paper Co.
Cleveland—Union Paper &
Twin Co.
Columbus—Central Ohio Paper Co.
Dayton—Central Ohio Paper Co.
Toledo—Central Ohio Paper Co.
OKLAHOMA
Oklahoma City—Western News-
paper Union
Tulsa—Tulsa Paper Co.
OREGON
Portland—Blake, Moffitt & Towne
PENNSYLVANIA
Bethlehem—E. C. Palmer & Co.
Pittsburgh—Furlong Paper Co.
Harrisburg—Ailing & Cory Co.
Philadelphia—Wilcox-Walter
Furlong Paper Co.
Pittsburgh—Ailing & Cory Co.
RHODE ISLAND
Providence—Ailing & Cory Co.
TEXAS
Memphis—Western Newspaper
Union
Nashville—Dillard Paper Co.
Knoxville—Dillard Paper Co.
UTAH
Austin—Carpenter Paper Co.
Dallas—E. C. Palmer Co. Ltd.
El Paso—Carpenter Paper Co.
 Ft. Worth—Southwestern Paper Co.
Hartlingen—Carpenter Paper Co.
Houston—E. C. Palmer & Co. Ltd.
San Antonio—Carpenter Paper Co.
UTAH
Salt Lake City—Western News-
paper Union
VERMONT
Richmond—Wilson Paper Co.

WASHINGTON
Seattle—Blake, Moffitt & Towne
Spokane—Blake, Moffitt & Towne
Spokane—Spokane Paper &
Stationery

Tacoma—Blake, Moffitt & Towne

WEST VIRGINIA

Charleston—Central Ohio
Paper Co.

WISCONSIN

Green Bay—Steen Mace
Paper Co.
Milwaukee—Nackie Paper Co.
Menomah—Sawyer Paper Co.
Stevens Point—Sawyer Paper
Products Co.

WASHINGTON D. C.

Washington, D. C.—Frank Parsons
Paper Co.

CANADIAN DISTRIBUTORS

Toronto (Ontario)—Wilson-Munro Co. Ltd.

Vancouver (B. C.)—Columbia Paper Co.
Winnipeg (Manitoba)—Midwest Paper Sales Ltd.

Montreal (Quebec)—Wilson-Munro Co. Ltd.

FOREIGN DISTRIBUTORS

Engby Grafisk A. S.—
Bergen, Norway

Trygve M. Engby A/S—
P. O. Box No. 893, Oslo, Norway

Pichler & Engby A-B—
Postligr 251973, Kungsgeten 48

Stockholm, Sweden

Tecnografico S. A.—
Avenida N. S. da Fatima

86—A E 72 A & B
Rio Do Janeiro, Brazil

Evelyn Haddon & Co. Ltd.—
62 Elford St. Ext., P. O. Box 4737

Johannesburg, Union of South Africa

Papeteries de Montreuil—
109 Quai Voltaire, Paris 10e, France

South-American—
P. O. Box No. 1674

Caracas, Venezuela

A. C. Ronson Philippines Corp.—
144 Juan Luna, Manila, Philippines

F. A. G. Ltd.—
P. O. Box No. 166

Lausanne, Switzerland

B. Winstone & Sons Ltd.—
50 Stamford St.

London S. E. 1, England





when the package must do the selling...

Milprint

PACKAGING SETS THE PACE!

On every shelf and display case in today's modern self-service store, Milprint packages are salesmen who meet the customers halfway to set up more sales! That's why Milprint packages are so often chosen by the leaders . . . because attractive design and brilliant precision printing invite the customer to buy, spur the impulse sales that keep cash registers busy.

Whatever your packaging problem, Milprint's unusually extensive facilities, wide variety of packaging materials and printing processes offer the best answer you can find anywhere. That's why it pays to call your Milprint man—first!

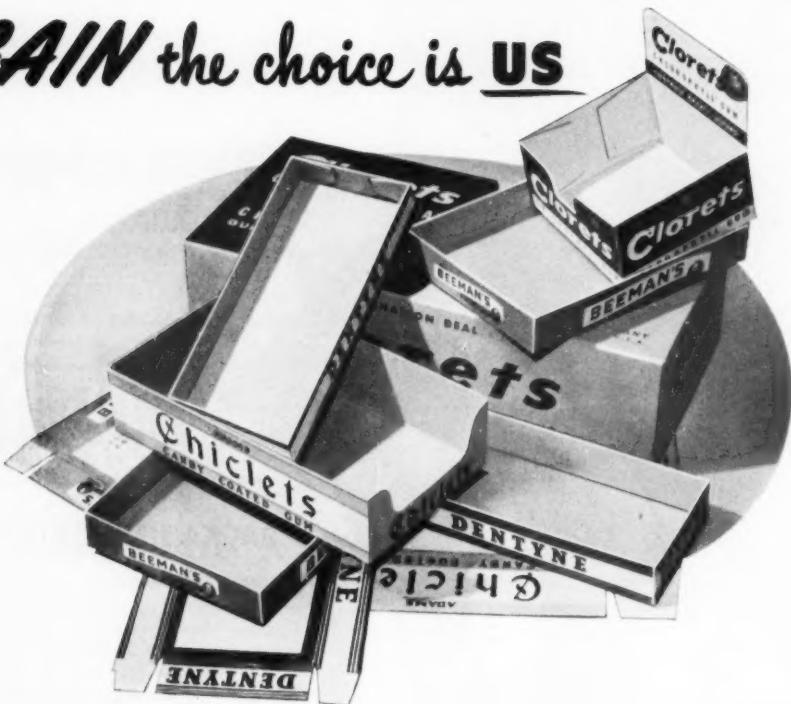
Printed Cellophane, Pliofilm, Polyethylene, Acetate, Glassine, Foils, Folding Cartons, Bags, Lithographed Displays, Printed Promotional Material

This insert printed by Milprint

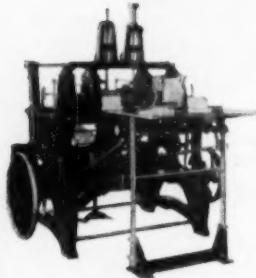
Milprint INC.
PACKAGING MATERIALS
LITHOGRAPHY & PRINTING

General Offices, Milwaukee, Wis. - Sales Offices in Principal Cities

AGAIN the choice is US



American Chicle produces many different sized display cartons for its line of quality gums



the STANDARD BRIGHTWOOD
Forms hinged-cover, telescope, trays, and tapered boxes in a wide variety of sizes at speeds up to 60 or more finished boxes per minute.

American Chicle Company, makers of a wide range of high quality chewing gums, use U.S. Automatic Brightwoods to form their attractive display cartons at their several plants located in the United States and in foreign countries.

They are typical of many other top-notch manufacturers and commercial boxmakers who use **US** equipment to produce precisely-formed, solidly-glued, sales promoting display boxes. In addition, they know the versatility of **US** Brightwood machines, how easily and quickly they can be changed over, how wide a range of sizes and types of boxes they can produce.

And now the Brightwood is available in two speed ranges—the Standard which forms up to 60 cartons per minute and the high speed which turns out up to 120 per minute. Write **US** today for complete details.

U. S. AUTOMATIC BOX MACHINERY CO., INC.

Owning and Operating NATIONAL PACKAGING MACHINERY CO. • CARTONING MACHINERY CORP.

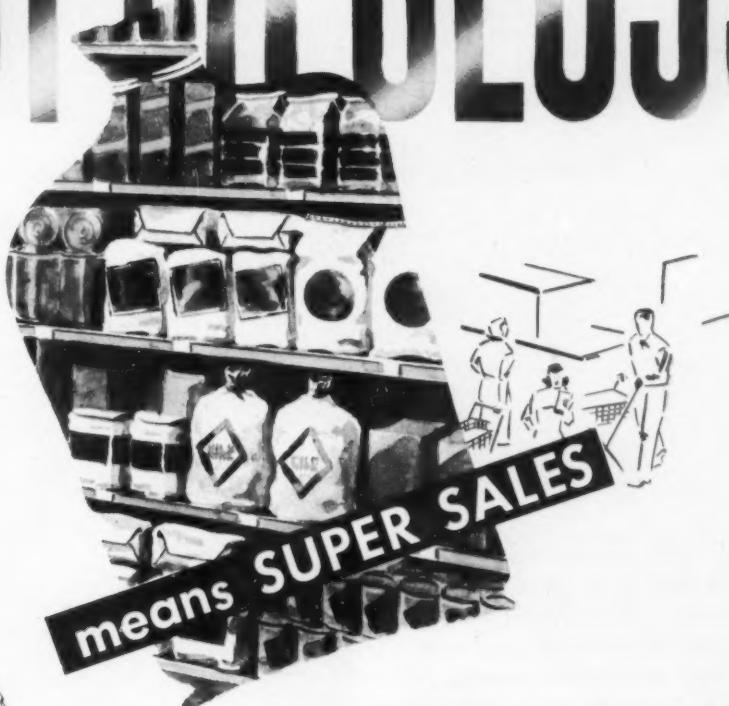
122 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: New York • Chicago



Net and Gross Weighing
Package Forming and Filling
Carton Sealing, Lining,
Wrapping, Box Making

SUPER GLOSS



• Successful marketers of consumer products know that the average Mrs. Shopper will reach for their package first if it has physical attractiveness and psychological impact. Your product packages must keep abreast of the "Impulse" buying pattern of self-service shopping in today's competitive market.

Your product can have the extra shelf appeal economically by packaging them in Super Gloss Hi-White coated Kraft paper bags. A&S plants are equipped with new, modern presses that print up to five brilliant colors. No other commercial bag printing process can top A&S Super Gloss corded specialty bags.

Send today for samples of A&S Super Gloss bags.



ARKELL and SMITHS

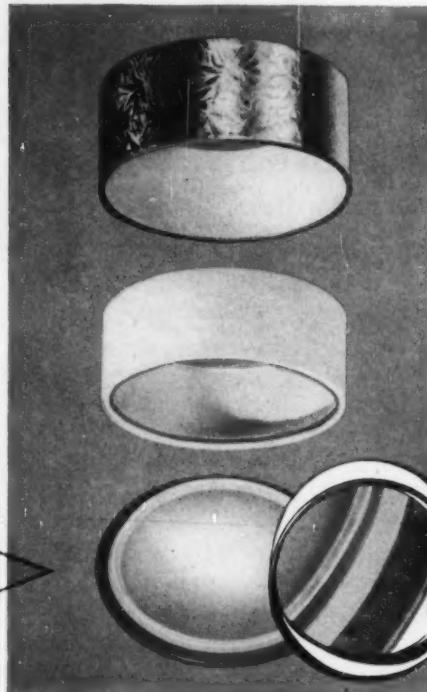
CANAJOHARIE, N. Y. • WELLSBURG, W. VA. • MOBILE, ALA.



*Box No. 100 million
with Ritchie's exclusive
snap-in bottom*

100,000,000 boxes ago Ritchie introduced this unique snap-in bottom. It was widely acclaimed—and has proved through the years to be the answer to practical, low-cost, sift-proof packaging for face, dusting, or any fine granular powders. Ritchie has the answer to your packaging problems, too!

Exclusive snap-in bottom locks to curled edge of drum to form absolute powder seal.



*W. C. Ritchie
AND COMPANY 8849 Baltimore Ave., Chicago 17, Illinois*

Folding cartons, set-up boxes, fiber cans, spools, tubes, cores, transparent packages.

New York, Los Angeles, Detroit, Dallas, Denver, Providence, St. Louis, Cleveland, Seattle, Jacksonville

Liquid packages

Automatic liquid packaging



FOR BETTER PROTECTION

BAG IT

THE VANANT WAY

Engineered protection and economy go hand in hand when you use Vanant bags. Whatever type and style of flat or square (gusseted) bag your product requires, Vanant makes it. Modern high speed machines fabricate, to your specifications, any available material from plain kraft papers to the laminated, glassine and other greaseproof and waterproof types. Be sure to check with Vanant before you buy!

Ask Your Vanant
Field Engineer About
the New V-C-I*, Lined
DUPLEX Bag

*Volatile
Corrosion
Inhibitor

WET STRENGTH
KRAFT

WATERPROOF
ASPHALT-KRAFT
(Such as 30/30/30)

GRADE A
MILITARY
SPECIFICATION

WAX COATED
KRAFT

GLASSINE
LAMINATED

VANANT

ENGINEERED PACKAGING
730 W. Virginia St., Milwaukee, Wis.
Plant: Tomah, Wis.

Also Converters of Military Specification

BAGS BARRIERS CASE LINERS

POLYETHYLENE AND OTHER TRANSPARENT FILMS

Bill Mohr
43 Leon St.
Boston, Mass.

Alvin's Novelty Assoc.
200 Franklin St.
Philadelphia, Pa.

R. M. Knudsen & Assoc.
Palms Bldg.
Des Moines, Iowa

Allied Commodity Co.
Ardmore Bldg.
Minneapolis 2, Minn.

Allied Commodity Co.
632 Dwight Bldg.
Kansas City 6, Mo.

King & Associates
1235 Market St.
San Francisco 3, Calif.

Day Peter & Assoc.
77 Walnut
Montclair, N. J.

Jerry Goldsmith Assoc.
1604-5 Massay Bldg.
Baltimore 2, Md.

Jerry Goldsmith Assoc.
880 Washington St.
Reading, Pa.

Protective Packaging Co.
842 S. Dearborn St.
Chicago 5, Ill.

Standard Parts & Equip Co.
904 N. Main
Fort Worth, Texas

King G. Anderson
2035 N. Figueroa Dr.
Los Angeles, Calif.

W. T. Robertson
532 1st Avenue N.
Seattle 1, Wash.

American Paper Co.
627 3rd Street
Milwaukee 4, Wis.



means

in ALUMINIUM FOIL

To the manufacture of packaging foil of every kind, plain or printed, coated or laminated, Venesta Ltd. bring the knowledge that comes from long experience. Venesta were already making foil for packaging long before its unique protective properties were widely recognised. To-day their rolling plant is amongst the largest and best-equipped in the world. In technical skill, in mechanical efficiency, in the selection of raw materials, and in their rigorous system of laboratory control, Venesta have the means to offer you top quality in aluminium foil for every packaging requirement. Whatever you

need in foil, it will pay you to consult Venesta Ltd. and let them put you in touch with the nearest of their many agents in all parts of the world.

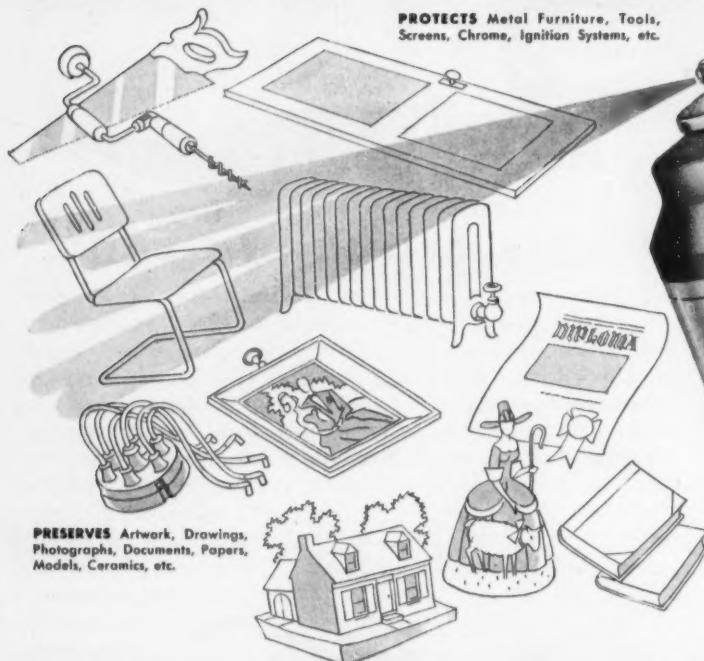
A PRODUCT OF THE PACKAGING DIVISION

VENESTA LTD., Vintry House, Queen Street Place, London, E.C.4, England. Cables: Venesta, London

T.A. 4536

SPRA-TAINER Does It Again!

PROTECTS Metal Furniture, Tools, Screens, Chrome, Ignition Systems, etc.



PRESERVES Artwork, Drawings, Photographs, Documents, Papers, Models, Ceramics, etc.



BRIGHT NEW FUTURE FOR MOST ANY SURFACE

Metal, Paper, Wood or Leather

KRYLON Clear Plastic Spray is a product of 1001 uses, providing a bright, decorative finish of lasting protection against time, wear and weather. It's equally handy in office, factory or home.

KRYLON Plastic Spray belongs to the famous and fast-growing family of products which are pressure

packed in SPRA-TAINER, outstanding because it's America's First and Leading Propulsion Can.

No other pressurized container offers the many sales advantages of SPRA-TAINER's exclusive "Modern Design" or the dependability of its patented "No Side Seam—No Top Seam" construction.

The superiority of SPRA-TAINER is reflected by all Cans in Crown's Complete Line for many and varied uses. Look to Crown for leadership in Progressive Packaging. YOU CAN'T BUY BETTER CANS!

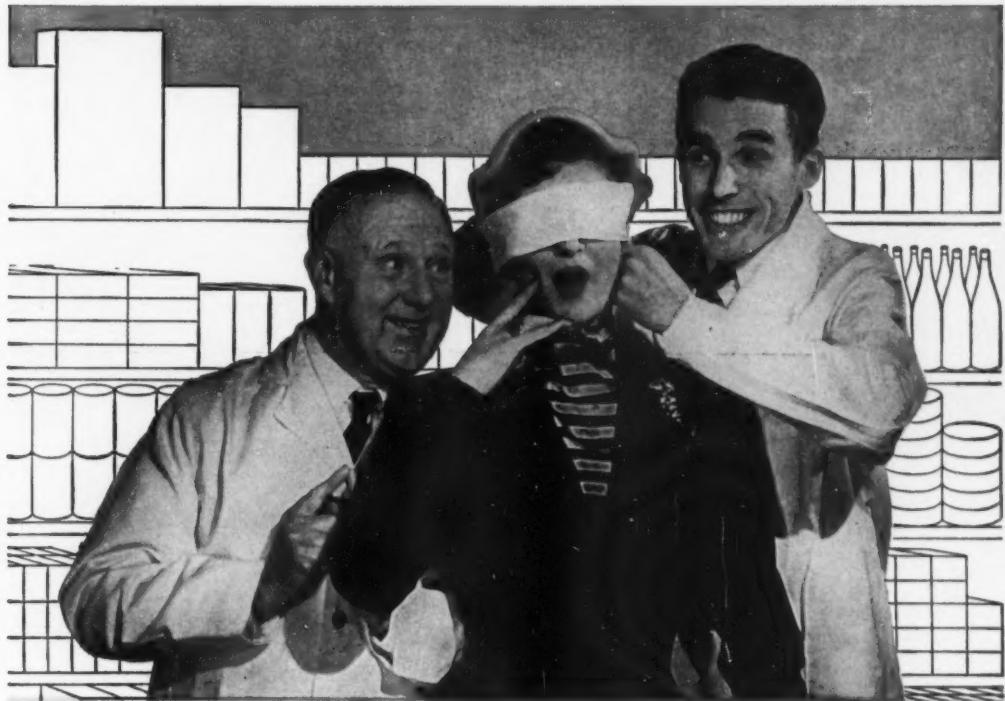


White Plastic Spray • Aluminum Plastic Spray

PHILADELPHIA, CHICAGO, ORLANDO, NEW YORK, BALTIMORE, BOSTON, ST. LOUIS

CROWN CAN
Division of
CROWN CORK & SEAL COMPANY

One of America's Largest Can Manufacturers



You wouldn't do this to your customer...

87% of the shopper's impressions are controlled by sight. You wouldn't expect her to buy blindfolded. Carry this further and you get the reason for today's ever-increasing demand for transparent cellulose film.

Wrapped in CELLOPHANE transparent film, merchandise is protected, looks good, attracts attention, but above all, CELLOPHANE lets the shopper see the goods and persuades her to buy.

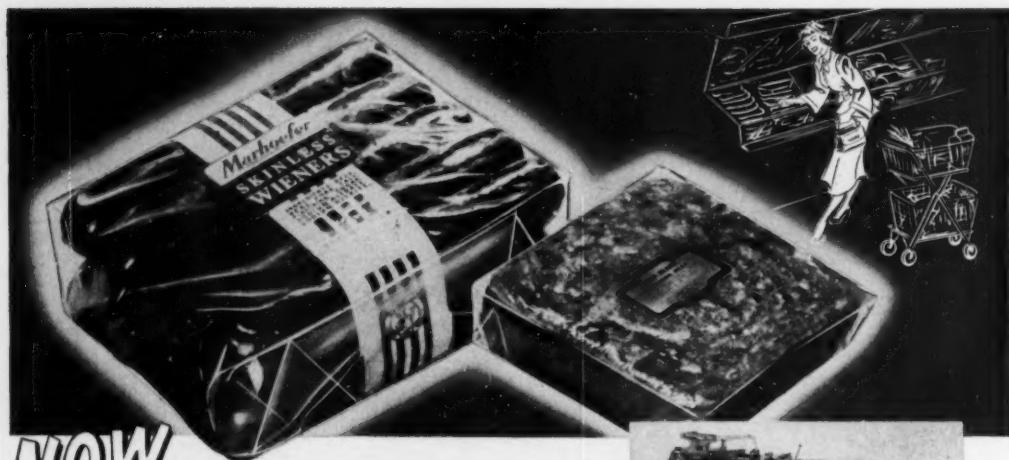
**Don't hide your product
show it —
in CELLOPHANE***

*CELLOPHANE is the registered trade mark of British Cellophane Ltd. in Great Britain, Australia, Ceylon, Eire, Hong Kong, India, Jamaica, New Zealand, Trinidad and Tobago, South Africa, Denmark, Iceland, Cyprus and Gibraltar.

BRITISH CELLOPHANE LIMITED

Sales Offices: 12/13 CONDUIT STREET, LONDON, W.I. ENGLAND

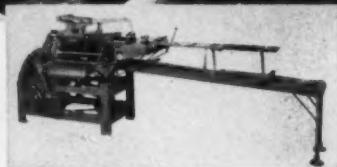
Reg. Offices and Factory: BATH ROAD, BRIDGWATER, SOMERSET



NOW

**THE MOST PROTECTIVE PACKAGE
OF ITS KIND...**

wrapped on the *Hayssen* V-TYPE UNDERFOLD



A Natural for Meat Packers—This outstanding new development in wrapping gives you the most moisture-proof package ever made. It means extra protection for perishable foods like wieners, luncheon meats, sausages, and similar items, particularly for self-service super markets. It gives you a neat, tight, better-looking package with longer retention of flavor and freshness, no chance of dryness in your product.

The Hayssen V-Type Underfold wraps almost any size or shape of meat product... *without the need for U-boards or trays*. It avoids excessive discoloration of the wrapping material. The Hayssen V-Type Underfold is rust-proof construction which protects the machine in damp meat-packaging conditions. Completely equipped with vacuum-type card feeder and roll-type labeler. Electronic registration for printed wrappers.

COSTS HALF WHAT YOU'D EXPECT... PAYS FOR ITSELF QUICKLY

Like all Hayssen machines, the V-Type Underfold saves you about half in first cost. Wraps 30 to 45 packages per minute and gives you that

smooth, dependable, high-precision service that has won top place for 42 years for Hayssen Wrapping Machines.

IT PAYS TO WRAP THE HAYSEN WAY
Hayssen MFG. COMPANY
 DEPT. MP-11, SHEBOYGAN, WISCONSIN

Since 1910, One of the World's Largest Manufacturers of Wrapping Machines



BAKED GOODS



MEATS



TEXTILES



VEGETABLES



FROZEN FOODS



ODD SHAPES



CANDY



ICE CREAM



DAIRY



PAPER

fisher's foils



FISHER'S FOILS LTD · EXHIBITION GROUNDS · WEMBLEY · MIDDLESEX · ENGLAND
TELEPHONE WEMBLEY 6911

CAMPAGNE WEMBLEY ABC CODE 6TH EDITION

Only Steigerwald
EMBOSSED FOIL SEALS
*add so much to your product
 for so very little*



SEND THIS FORM FOR INFORMATION

on

Steigerwald Embossed Foil Seals

A. M. Steigerwald Co. *Creators and Producers
 910 W. VAN BUREN ST.
 CHICAGO, ILLINOIS*

of all types of fine labels



Our company name is _____

Our product name is _____

Other label copy is _____

Without obligation we want you to design a New Foil Label
 and give us a price on the following quantities _____

We now use foil labels like the sample attached. Please
 quote prices on the following quantities _____

ATTACH YOUR PRESENT LABEL TO THIS FORM

Mark reply for: Mr. _____

CHARLOTTE, N.C.
 L. M. Clark
 612 So. Pheasant St.

CLEVELAND
 A. C. and J. S. Foster
 318 Hippodrome Bldg.
 Cherry 1-2408

DANVILLE, ILL.
 F. F. Michenfelder
 1208 Sheridan St.
 Danville 44473

LOUISVILLE
 Joe Herrmann
 416 Jefferson St.
 WAbash 1-257

MEMPHIS
 Edward Magnus
 278 S. Front St.
 Memphis 8-2574

MINNEAPOLIS
 J. E. and J. L. Moor
 2329 DuPont Ave., So.
 LCoast 5-5300

NEW YORK, N.Y.
 John H. McLaren
 646 W. 125th St.
 MOnument 2-0237

OAKLAND
 Jean S. Ponten
 600 Sixteenth St.
 TEmpleton 2-1765

ST. LOUIS
 Marvin Yates Company
 Arcade Building
 GArfield 0741



a layer of transparent Acetate

adds sparkle that sells...
a surface that protects

A layer of transparent acetate film heightens the lustre . . . compels attention . . . provides a smooth surface for sharp colorful reverse printing . . . makes a hard-to-beat selling package for prepared mixes, desserts, food concentrates . . .

Laminates of acetate and other materials: kraft paper, metal foil and vinyl hold the line against moisture-vapor, oil and grease, drying out, contamination . . . give drugs, assault rations, pharmaceuticals enduring protection.

Your Celanese representative can give you the laminate story.

Or write Celanese Corporation of America, Transparent Films Dept. 108-K, 180 Madison Avenue, New York 16, N. Y. In Canada, Canadian Chemical & Cellulose Company, Ltd., Montreal and Toronto.

Celanese*
Acetate
TRANSPARENT FILMS

*Reg. U. S. Pat. Off.



The ultimate of
quality,
care,
craftsmanship
... go into
Rowell Boxes



The creative art of the master pottery
maker finds its counterpart in the exacting
skill Rowell devotes to making fine
set-up boxes . . . a skill known by
packagers everywhere.

E.N. Rowell Co. Inc.

Mfrs. Fine Paper Boxes
Batavia,
N. Y.



Photo courtesy Metal Office Furniture Co., Grand Rapids, Mich.

Custom Protection—prevents shipping damage as no other packaging method known!

Shipping damage annually takes a heavy toll from industry in losses of time, money and good-will. Yet it's easy to *prevent* damage in transit—speed up packaging operations—and ship your product in a better looking package at lower cost—through the use of up-to-date packaging materials.

Many companies have eliminated or greatly reduced damage with Kimberly-Clark Interior Packaging—KIMPAK®—a modern packaging material of unlimited versatility that provides *custom* protection for a wide variety of products.

KIMPAK is soft, clean, non-abrasive . . . easy to apply and pleasant to handle. KIMPAK provides maximum protection to fine finishes of wood, metal, plastic or glass products—provides cushioning to absorb vibration and shock to delicate, fragile products. Available in sheets, rolls, and pads of various dimensions and thicknesses, backed or unbacked, to suit your convenience or need. Today, investigate *custom protection* with KIMPAK—the safe, *smart* way to prevent shipping damage. For information, write Dept. L-11, Kimberly-Clark Corp., Neenah, Wis.



® T. M. REG. U. S.
© FOREIGN COUNTRIES

A Product of
Kimberly-Clark



Cosmetics Business Machines Furniture



Heavy Machinery Confections Appliances



Instruments Food Pharmaceuticals



Electronics Chemicals Glassware

MODERN PACKAGING

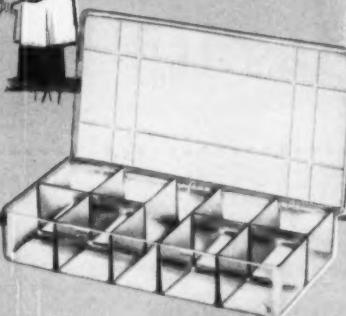
The Difference...

BETWEEN THIS



AND THIS

IS OFTEN THIS



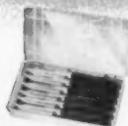
VLCHEK PACKAGES Promote Sales for EXAMPLE—



EXPANDED SALES

"We have had many compliments from our customers and definitely feel that we have expanded our sales of these parts..."

So says a distributor who uses Vlchek Plastic Boxes for packaging lawn mower retainer and ball assortments.



PACKAGE SELLS AND SERVES

Cutlery manufacturer (Tel-Tru) packages six steak knives in a beautiful Vlchek Plastic Box.

The package attracts customers, sells the product . . . also serves as attractive container for the knives in the home.



MULTIPLE SELLING

Stationery dealer packages 10 office supply items in a Vlchek Plastic Box—pencils, pens, paper clips, thumb tacks and other items.

Package gets attention, makes sales—not one item but ten—multiple selling.

**MANY SIZES AND
COMPARTMENT
ARRANGEMENTS...**



**ECONOMICAL
IN ANY
QUANTITY**

*Need a Bag?
You Name It...*

Bemis Has It!

Whether your product is fine as talcum or big as baseballs . . .

If you need visibility of the product in the package . . .

Whatever your counter or shelf display needs . . .

If you value bright, crisp, true printing of your brand . . .

There's a Bemis Bag that will do your job efficiently and economically.

And Bemis filling and closing machinery will probably be your best bet, too. Ask your Bemis Man for the *complete story*.



Deltaseal



Flexi-Carton



Foto-Pak



Plastic (Cellophane,
Polyethylene, Pliofilm)



Tite-Fit Tubing



Paper Specialties



Multiwall Paper



Waterproof (Laminated Textile)



Textile (Cotton and Burlap)



General Offices—St. Louis 2, Mo.
Sales Offices in Principal Cities



FUNDAMENTALS OF CONTAINERS IN PACKAGING!

Type No. 5—Metal End Turn Sifter Top Cans

Turn Sifter Top Cans are made of high grade uniform gauge chipboard, spirally wound to form the sidewall of the container. To such a sidewall, the end closures of metal are applied to achieve a deep drawn seamed closure. The resulting container is of high quality and will withstand hard and repeated usage.

SIZES AVAILABLE . . . These containers are available in diameters of 1-7/8", 2-1/4" and 3" and to lengths as desired.

END CLOSURES . . . In general practice, and where quantities are relatively small, these cans are made with a metal undertop and a well fitted nickel plated turn sifter top, perforated to suit requirements with from one to twelve openings. Bottom closures are of the tin plate ring and plug type. Where quantity warrants, they may be made as a seal-tight container by means of a tin plate bottom closure to be applied after the container is filled. Seaming machines are available under lease for this closing operation. Where preference dictates, decorative colored ends are readily available by use of bright color lacquers or baked enamels.

* * *

LABELING . . . Strip form labels may be applied or, as determined by the size of the container, direct printing on the can in single color. Where a spot label is desired, decorative paper, in harmony with or in contrast to the spot label may be spiraled onto the outside of the container.

VARIATIONS . . . Turn Sifter Top Cans may be provided with any of a multitude of special liners to suit particular purposes. Liners in popular use include moisture and grease resistant barriers such as paraffin, glassine, aluminum foil and various plastic special lining materials.

END USE . . . The Metal End Turn Sifter Top Can affords many solutions to the problems of packaging fine and medium coarse granular products. Talcum and dusting powders, insecticides, moth crystals, foot powders, grated cheese and many others are typical of products successfully packaged in these containers.

SHIPPING . . . All Cleveland Containers are carefully packed to protect their bright metal tops. Uniform sizes of high test corrugated shipping cartons ensure ease of handling and economy in storage space.

* * *

WHY PAY MORE? FOR THE BEST

• • • CALL CLEVELAND!

The **CLEVELAND CONTAINER Co.**

6201 BARBERTON AVE. CLEVELAND 2, OHIO

- All-Fibre Cans • Combination Metal and Paper Cans
- Spirally Wound Tubes and Cores for all Purposes

PLANTS AND SALES OFFICES: Cleveland, Detroit, Chicago, Plymouth, Wis., Jamestown, N. J., Ogdensburg, N. Y. • ABRASIVE DIVISION of Cleveland

SALES OFFICES: Grand Central Terminal Bldg., New York City; Washington Gas Light Bldg., Washington, D. C.; West Hartford, Conn.; Rochester, N. Y.; Cleveland Container Canada, Ltd., Prescott, Ontario • Offices in Toronto and Montreal



Write for additional copies of this message.

**PREVENT
NICKS
AND
SCRATCHES**

...with tailor-made **Riegel papers**

**A few things RIEGEL
can do for you . . .**

- Keep products dry
- Keep products moist
- Retard rancidity
- Seal with heat or glue
- Provide wet strength
- Stop grease penetration
- Retain aromas, flavors
- Resist extreme cold
- Reduce breakage
- Prevent sifting
- Protect from light
- Resist alkalies
- Resist corrosion
- Boost machine efficiency

PROTECTING delicate surfaces or fragile edges of fine products is an everyday packaging problem . . . a problem Riegel has solved for hundreds of widely different products from X-ray film and polished marble to razor blades. Whether the solution is a simple lacquer-coated interleaving paper . . . a special anti-tarnish sulphite . . . or a custom lamination, Riegel can usually tailor-make the right paper . . . quickly, efficiently, economically. Write to **Riegel Paper Corporation, P.O. Box 170, Grand Central Station, New York 17, N.Y.**

Riegel

FUNCTIONAL PAPERS FOR PROTECTIVE PACKAGING

► WRITE FOR SAMPLE BOOK





Pneumatic's 1952 Packaging Review — Every one of these famous products is packaged by Pneumatic equipment . . . world renowned for "lower cost per container" operation.

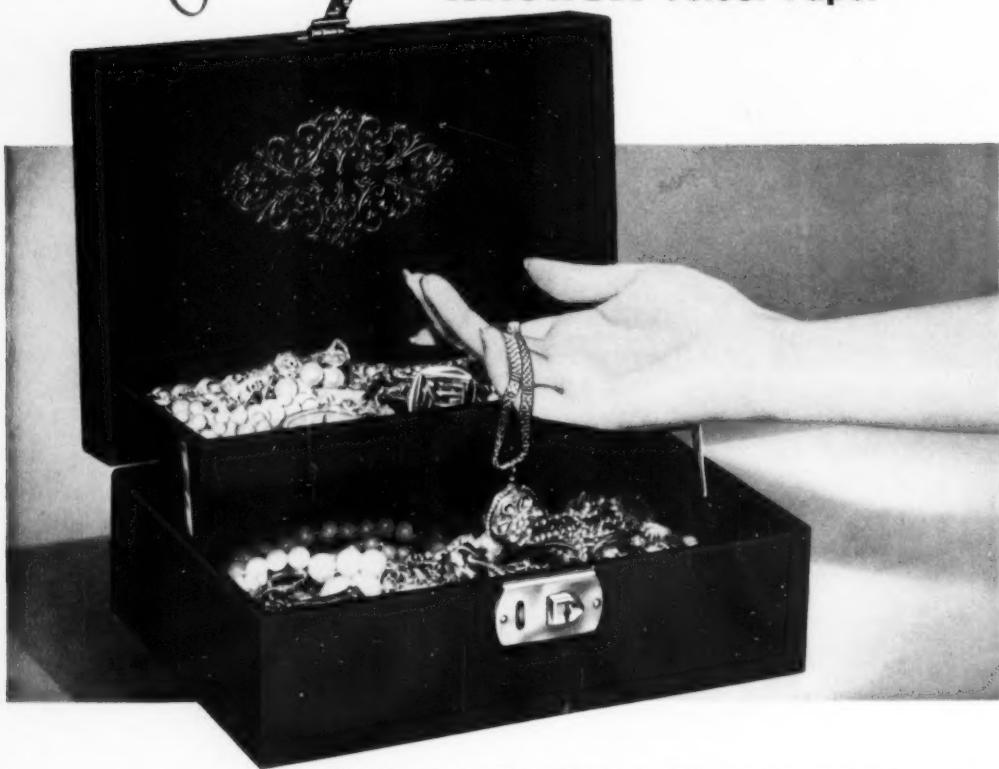


Pneumatic and Bottling Equipment
OVER 100 DIFFERENT MACHINES FOR AUTOMATIC PRODUCTION

PNEUMATIC SCALE CORP., LTD., 82 Newport Avenue,
Quincy 71, Mass. Also New York; Chicago; San Francisco;
Los Angeles; Seattle and Leeds, England.

Jewel of an idea

— gives that "expensive look" with
NASHUA Velour Paper



Whether it's the lining for her jewel box or a container that will sell your product faster because it "looks expensive", you can do wonders with Nashua Velour Papers.

If you package a quality product . . . give it the *plus feature* of a really different package. Call Nashua. We will be glad to work with your production and sales executives.



NASHUA CORPORATION

NASHUA, NEW HAMPSHIRE
formerly Nashua Gummed and Coated Paper Company

Every Service in Flexible Packaging that Sells

DESIGN / PRODUCTION

PRINTED FILM • WAXED WRAPPERS • BOX PAPERS • BOX STAVES • GUMMED PAPERS • HEAT
SEAL PAPERS • FLOCKED PRODUCTS • PARTY PAPERS • PRINTED BANDS • CORRUGATOR'S TAPE
SEALING TAPE • MOISTENING MACHINES • TECHNICAL PAPER PRODUCTS

VOLUME 26

NUMBER 3

NOVEMBER 1952

Modern packaging

VARIETY of labeling and decorative treatments is found in this typical group of frozen-food can users. Eco-Pak and Valamont brands use moistureproof paper labels; all others are lithographed on the metal. Majority favor lengthwise label for best display in frozen-foods case. Note Green Giant's experimental can for frozen peas.



Photo Courtesy CONTINENTAL CAN CO.

Frozen foods in cans

DISCOVERY THAT CONSUMERS CAN BE TRUSTED TO DISTINGUISH

FRESH-FROZEN FROM PROCESSED FOODS IS PUSHING A GROWING TREND

An important though all-but-unpublicized new trend is developing in frozen-foods packaging. Having established themselves as the standard package for frozen juice concentrates—now the biggest single item in the whole frozen-food category—metal cans are moving in on frozen fruits and vegetables, and threaten to capture an important part of that territory which, in consumer sizes, has been held almost exclu-

sively by paper and composite containers.

Without taking sides in what promises to be a major packaging battle, MODERN PACKAGING believes it important to report what is happening in this fast-moving trend and to examine the advantages and disadvantages reported by some freezers who have changed to cans.

Packers credit Winter Garden, Knoxville, Tenn., with the first large-

scale retail-size packing of frozen fruits in cans just two seasons ago. Last season most packers watched and waited. But with the current crop season, an estimated one-half of all the strawberries packed for retail sale, trade sources say, will be in metal cans and it is reported that this proportion would have been even higher if the steel strike hadn't tightened tinplate supplies. Strawberries, which account for about three-quar-

ters of the entire 81-million-pound volume of frozen fruits packed for retail sale, naturally dominate the picture, but other frozen fruit and berry crops, as well as some vegetables, have appeared in metal cans.

However, the biggest field for the can is expected to be in fruits, where there is a juice problem. These products have been heavy users of the composite fibre-metal-end container. The can has less-obvious advantages for vegetables, which in 1951 accounted for about 527 million pounds of the frozen-food retail pack, as against 90 million pounds of fruits and berries.

One major can company had 22 customers using retail-size metal cans for frozen fruits during the past season; another had 11. One company's sales in this field were up 633% for the first half of 1952 over 1951. The volume is expected by the can companies to be at least doubled during the next packing season.

Can makers are predicting an almost-universal switch to metal by fruit freezers in the 1953 season. Previously any increased proportion of a crop which was frozen instead of being conventionally canned meant proportionately fewer cans needed. Can men now see an opportunity to regain some of the ground lost to them with the growth of the frozen-food industry.

When quick-frozen foods first made their appearance some 25 years ago, the conventional hot-processed food can was examined as a logical package, but was quickly discarded because of the feeling that housewives would have to be educated to the necessity of keeping frozen foods constantly frozen until use. Packers shuddered at the thought of food poisoning that might result if non-sterile frozen foods were mistaken for, or in ignorance handled like, ordinary processed canned foods. It appeared that the surest way to avoid this danger was to use a distinctive package—which meant anything but a can. So the familiar paper package and efficient machinery for handling it were developed and universally adopted.

One factor which may chill the can makers' present optimistic predictions is the existence of millions of dollars worth of specialized carton-packaging machinery which cannot lightly be written off.

The background

The postwar development of the composite fibre-metal-end container—pushed by the can makers themselves—was a small step in the direction of the can. The machinery which fills and seals this type of container, incidentally, can readily be adapted to the handling of all-metal cans.

But the big step came with the development of vacuum-processed fresh-frozen orange juice concentrate. It was quickly seen that no paper or fibre container with dangers of spillage on opening would be adequate for this liquid product. The orange-juice processors took the bull

by the horns and almost from the start marketed their product in 8-oz. metal cans. The rapid acceptance and growth of orange-juice concentrate, which liberated the American housewife from the breakfast-time drudgery of orange squeezing, is one of the most phenomenal marketing stories of recent years. According to trade estimates, the number of 8-oz. cans used for this one product this year will be in excess of 1.2 billion.

With the frozen-orange-juice can a familiar sight in every grocery-store frozen-foods cabinet and in almost every home refrigerator, the can makers felt that it could no longer be said that the housewife couldn't safely handle frozen foods in cans. Packers of fruits in liquids, who had always had some complaints of spillage of juices in the opening of defrosted fibre packages, realized that the way was open for them to use metal cans if it should prove advantageous. Retailers have exhibited some opposition to the change. But from all reports, wherever berries in cans have been placed in stores' freezer cabinets they have been accepted by customers without question.

Frozen-food packers are, of course, not unfamiliar with metal as a package, having used large sizes for institutional-size packs for many years. The 30-lb. tin accounts for almost 60% of the total frozen fruit and berry freeze.

Labeling techniques

The can manufacturers, still anxious to avoid any danger of the confusion between processed canned goods and frozen foods in cans, have been passing along the Department of Agriculture recommendation that frozen foods in sealed cans be identified by a distinctive label style and that the can ends be lithographed with the message, "Keep frozen until used."

Most packers who have adopted cans (with important exceptions including Stokely's and Libby) are using labels on which lettering or pattern runs the length of the can instead of around the can; this not only sets the package apart in appearance from conventionally canned goods, but is thought to provide better label display when cans are placed on their sides in retail cabinets.

A majority of the lithographed end labels in current use are simple one-



SIZE FLEXIBILITY is important advantage of the can. Winter Garden, one of first to use cans for frozen fruits, has recently added 8-oz. size to supplement 11-oz. picnic size. Both are handled on the same machinery. Both cans are lithographed.



IMPORTANT NAMES are attracted to frozen-foods field by ease of packing in cans. Canners like Dole can use same filling and closing machinery as that used for processed non-frozen foods.



BEAUTY of full-color reproduction by lithography on metal is one of the advantages of the frozen-food can. These labels cannot be lost and are not likely to be damaged by frost or handling, no matter how long they remain in display case.

color messages to "Keep frozen until used." However, some more elaborate examples have been developed, such as Sunset Frozen Foods' use of a drawing of berries with the words "Frozen Strawberries, keep frozen until used." Tennessee Frozen Foods, Inc., Portland, Tenn., using a distinctive all-over lithographed design which strives for the effect of a transparent container, has held side label space to a minimum by using the can end space for a red and white design which includes both the "Keep frozen" message and instructions for thawing. The company uses this label style for strawberries and blackberries. A. L. Russo, Inc., Watsonville, Calif., also makes this use of end label to free the side-label area for an attractive all-over design. Stokely, with a black-on-gold enamel end label, and Nifty Frozen Foods Corp.,

Brockport, N.Y., are using end-label space for trademarks as well as the keep-frozen warning.

The major frozen-food packers such as Birds Eye, Pictsweet and Snow Crop have not yet marketed frozen fruits in metal cans; these firms, particularly Birds Eye, have been closely identified with the development of the present types of non-metal and composite containers and their use of cans seems to have been confined entirely to frozen juices. On the other hand, Libby and Stokely's, with frozen strawberries in cans, and Dole, which has started to introduce a canned frozen chunk-pack of pineapple, seem to be going along with the new trend.

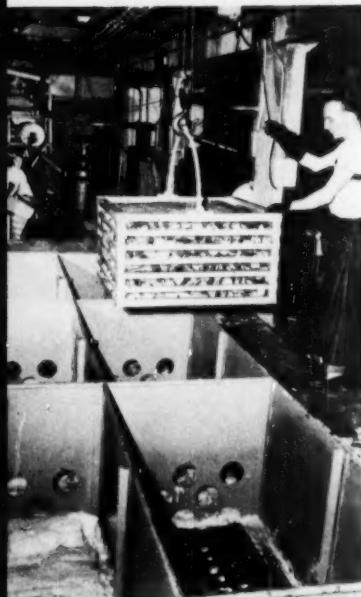
It is obvious, of course, that general acceptance of metal cans as a retail package for frozen foods would make it much easier for canners of

conventional processed foods to freeze a part of their output. Such firms already have can-filling and closing equipment in the crop areas and this equipment is suitable for use on can-packed frozen foods if the cooking stage is by-passed and a final freezing stage is added to the line.

The Green Giant Co., Lc Sueur, Minn., is experimenting with its well-promoted canned-pea label on a frozen-in-cans pack—a move which may well be an illustration of the way well-known canned brand names could go after some of the business frozen vegetables have taken away from them. Green Giant's lithographed label for frozen peas—turned lengthwise of the can—is designed to combine maximum brand recognition with proper identification of the contents as a frozen food. However, the close resemblance between Green



END LABELING is used by most packers to stress the necessity for keeping contents frozen until used—but no difficulty has been experienced with consumers already familiar with frozen juice concentrates.



IMMERSION FREEZING in calcium bath is an economical new method possible only with all-metal, hermetically sealed cans. This is Winter Garden Co. plant.

Giant's regular can and its frozen-food can would probably have been considered an invitation to trouble as recently as five years ago.

Cost factors

If one could assume for the moment a state of consumer naturalness about cans vs. non-metal and composite containers for frozen foods, freezers' decisions about a switch to cans would probably hinge on the economy factor. This factor has two important facets in the current state of the market. One concerns the cost of canning vs. other packs for frozen foods as a packaging cost alone and the other concerns the amount of product put into the individual package.

The can widely adopted for strawberries is the 211 by 400 size, which has a minimum permissible fill by volume of a little less than 9 fluid ounces. Packers trying to maintain an 11-oz. fill on frozen berries in syrup found that overfilling to assure this content was causing bulging of cans during freezing. Reduction of the fill to 10½ oz., or in a number of cases to 10 oz., has solved this problem for most packers. In general, a 10% headspace is recommended when fill-

ing a can with a product to be frozen, to permit the product to expand without bulging the can. One manufacturer calls the 10% headspace "imperative."

When the fill of the canned frozen fruit is dropped to 10½- or 11-oz. (some use 10-oz.), the spread between this amount of fruit and syrup and the 12- or 16-oz. pack in most non-metal or composite containers used for frozen foods begins to produce a cost factor which may be used competitively in pricing at retail.

Packing in cans lends itself particularly well to reduction in fill because the metal cans are usually closed under vacuum. The vacuum in the headspace reduces the tendency for the berries to become discolored by oxidation, as they would if air space were left in the container and berries were not completely covered by syrup.

When a greater reduction of pack size is desired, a packer using metal cans is able to obtain smaller cans which are still standard items and which he can fill and close on the same equipment he uses for the larger-size cans, as long as the can diameter is the same. At least one packer, Winter Garden, has taken advantage of this inherent flexibility of cans by adding an 8-oz. size (211 by 304 can) to supplement its 10½-oz. (211 by 400) can of frozen sliced strawberries.

Whereas the change in industry and public attitude toward frozen foods packed in cans has given the food processor an easier access to the frozen-food market, it has merely presented the established packer of frozen foods with a new alternate packaging medium. Since no one has as yet detected conclusive consumer preference for one package as against another, the individual packer must assess the new medium in terms of his present methods.

Frozen-food packaging methods in use today vary considerably in speed and efficiency, ranging all the way from hand filling to highly mechanized or even automatic lines for the forming, filling and closing of containers. Mechanization is not often found among the large firms specializing in frozen foods alone and it is most highly developed here for products like sliced fruits which will flow. Where such mechanization exists, speeds and efficiency may approach or equal that of good process can-

ning; consequently, the economies of the metal can as a package would have to be considerable to induce such a well-equipped firm to throw out present equipment and convert to its use.

If he were making a switch to cans, a well-equipped frozen-food packer would probably find that some of his filling equipment could be modified to fill metal cans. He would probably need new equipment to close the cans and would probably take advantage of the vacuum closure attachments available on can-closing equipment. As for freezing equipment, almost all commercial freezing equipment, whether air blast or tunnel, immersion tank or shower principle, can be used for metal cans. A notable exception is the multiplate freezer specially developed for efficiency on flat-sided packages—this type of unit, according to authorities, probably cannot be successfully modified for use with round cans.

For the average frozen-food packer, particularly the man who does not already have a heavy investment in specialized machinery for forming, filling and closing other types of containers, an important consideration might be the availability of a number of well-tried, more-or-less standardized pieces of high-speed equipment for filling and closing metal cans, for unscrambling and case loading them, etc. The process-canning industry, being much older and still very much larger than the frozen-foods industry, is catered to by a great many equipment suppliers and most of this equipment is applicable to the frozen-food-canner's problems. Equipment developed to provide

economical efficiency for the small cannery operation on a one-crop basis could solve many equipment problems for frozen-food packers in similar circumstances.

Most of the above points are confirmed by a detailed analysis of the trend which has been developed, for its own guidance, by Continental Can Co.

Package performance

There is not much quarrel with the idea that the hermetically sealed metal can is potentially the "ideal" container for any kind of food. Most of the improvements in conventional frozen-food containers have been hailed in terms of bringing such containers closer to the metal can in protection to contents. It seems to be an open question among packers today just how successful container manufacturers have been in closing the gap between the containers and the cans in these respects.

The Continental Can report, in discussing the advisability of a switch to metal cans by any individual frozen-foods packer, advises that "a careful analysis of the advantages as well as the disadvantages of a can over a package must be made by the packer himself. Important factors are cost, durability, moisture-vapor transmission and the effect of air or oxidation on the product."

In the basic matter of cost, it is difficult to generalize because of the considerable variety in constructions, coatings, materials, etc., encountered among frozen-food containers now in use and because of the effect of the container choice on costs and efficiency throughout the filling, closing

and freezing operation. It must be noted, however, that metal cans fill the difficult requirements of a container for a juicy product that is filled wet, frozen in the container and then thawed again in the container. Most freezers using metal gain in can-buying economy by using the popular "picnic" size can which is produced in truly enormous quantities.

From the point of view of durability, of course, few economical packages of any type can surpass the properly protected metal can.

The hermetically sealed metal can provides an impervious barrier to water-vapor transmission, thereby eliminating possibility of dehydration or "freezer burn" from escape of moisture through the package in frozen storage. However, the experts point out, the headspace inside the can, necessary to allow for the expansion in freezing, may permit moisture to leave the product and form frost crystals unless headspace after freezing is kept at a minimum. The control of fill must be quite accurate to avoid excessive after-freezing headspace on the one hand or an overfill which will bulge the can during freezing.

An entirely different problem, that of oxidative browning of fruit where it comes into contact with air trapped inside a hermetically sealed container, can be largely minimized, it is said, when packing in metal by use of a vacuum-forming device such as a steam turret on the closing mechanism. Fruits high in ascorbic acid, such as strawberries, are said to be least troubled with this problem and the more susceptible fruits such as peaches can be protected by addition

PIE CHERRIES, long a big-volume item packaged in institutional sizes, promise to gain new popularity in the home in these new 1-lb. and 20-oz. cans. Note the recipe labels.



PAPER LABELS of a special moistureproof type have proved successful and are favored by packers who wish to withhold brand identity until the time of shipment.



PHOTO COURTESY U. S. PRINTING & LITHOGRAPH CO.

of ascorbic acid to the syrup, proper fruit-to-syrup ratio so that syrup covers the fruit and vacuum closure.

Proponents of the metal can expect that the possibility of vacuum closure will be one of the strongest inducements for a change to metal.

Immersion freezing possible

One strong point that has been raised in favor of metal cans for frozen foods is the adaptability of cans to immersion freezing methods. Cans naturally transmit heat readily in either direction, making them efficient containers in which to freeze a product. Their hermetic seal and impermeability permits immersion in a tank of alcohol or calcium chloride chilled to sub-zero temperature and agitated to accelerate heat transfer. One packer reports savings of as much as 25 cents per dozen cans

when using this method. Fast and highly efficient freezing can be obtained using continuous conveyor methods to immerse cans, although batch immersion is perhaps more common. The calcium-chloride method requires an after-dip in sodium silicate and thorough rinsing in clear water. Cans frozen by immersion or spray methods require appropriate finish varnishes, or at least a stripe of varnish protecting the outside seam, in most cases, as protection against the solution.

The cold air blast or tunnel freezing methods will also successfully freeze cans; freezing in this case may not be as efficient, but the cans do not have to be treated to withstand alcohol or other chemicals.

Lithographing directly on the metal can provides an ideal labeling medium for the metal can of frozen food

and many attractive examples of this work may now be seen, some in full color, in retailers' frozen-food cabinets. The lithographed coating also serves to protect the can from possible corrosion. Electrolytic plate is currently being specified for use with frozen fruits, with cans enameled inside using an enamel chosen for the type of fruit that is to be packed. Specifications usually call for can ends enameled both inside and out, with a lithographed warning to "Keep frozen until used" on the outside of both ends.

Some frozen cans are being successfully labeled with special waterproof paper labels after freezing. These are reported to stand up well in service and to provide economies for some packers. The labels are said to be applied to the cans with the same resin-based adhesives normally used in labeling cans and have generally proved their ability to maintain an attractive, unwrinkled appearance through freezing, thawing and prolonged wetting. Among brands of frozen strawberries appearing in paper-labeled cans are those of several West Coast packers: National Fruit Canning Co., Seattle, with Valmont brand; Washington Packers, Inc., Tacoma, with Charmed Land and Dewkist; Kelly Farquhar & Co., Tacoma, with Sparklets; and Strawberry Exchange Cooperative, Fresno, with Eco-Pak brand.

Custom frozen-food packers, or packers with a number of their own different brands and products going into identical sizes of metal cans, are able to reduce can inventory and step up plant efficiency by using paper labels. Another advantage that has been mentioned in connection with the special paper labels is the fact that freezers sometimes grade certain fruits after freezing and a period of storage, when keeping qualities have manifested themselves. When using paper labels, the packer is free to decide which of several labels a particular pack of fruit deserves.

User convenience and education

The big consumer-convenience advantage claimed for metal cans is, of course, the fact that every housewife knows how to operate a can opener. Considerable weight also is given to the fact that an unopened can of frozen food can be thawed rapidly if placed under the tap or (This article continued on page 196)

EAST, WEST AND SOUTH are represented in this group of fruit packers that has recently adopted can packaging. All are standard 211 by 400 sanitary cans; fills vary from 10 to 11 oz., allowing price flexibility.



PHOTO COURTESY AMERICAN CAN CO.

Counter-and-stacker

MACHINE ATTACHMENT TAKES LAST BOTTLENECK OUT OF TEA-BAG PRODUCTION;

DELIVERS BAGS COUNTED IN POCKETS, READY FOR LOADING IN CARTON

In the steady march toward ever-greater packaging mechanization, obstacles are sometimes encountered when package units have been subdivided into separately wrapped single portions. The product, after filling into the single-portion packets, is no longer free flowing for easy filling into the final package and, what is perhaps most significant, there has been introduced the necessity for *counting* the fill instead of merely measuring its weight or volume.

Tea bags provide a clear example of this kind of packaging dilemma. High-speed machines have been developed for forming, filling, sealing and even tagging tea bags, but until very recently the output of these high-speed machines has had to be laboriously counted into cartons by employees who served as a "stage" of the filling lines.

New machinery installed in the spring of this year at the Boston plant of the Salada Tea Co. has substantially solved this problem for Salada. The machine, designed as an attachment for the heat-sealing tea-bagger and tagger combinations which Salada uses, almost entirely eliminates counting on the part of the packer and frees a major portion of the packer's attention for the inspection function. The new machine, which both counts and stacks, permits a single packer without fatigue or stress to package the entire output of one of Salada's duplex tea-bag machines, a job which formerly required two packers.

The counting job had been performed with the ever-present possibility of human error, as some of the best packers had been found to "sense," rather than actually count the carton fill. Maintaining accuracy with a great many machines under these conditions was naturally a constant problem.

The counter-stacker, instead of presenting the packer with an unbroken stream of tea bags, presents the bags in counted stacks in a con-

tinuous series of open rectangular pockets, which move intermittently. According to carton size, each filled pocket takes from 16 to 30 sec. to travel across the open end of the machine, which allows ample time for inspection, removal of the filled tray of cartons and substitution of a prepared load of empties for filling.

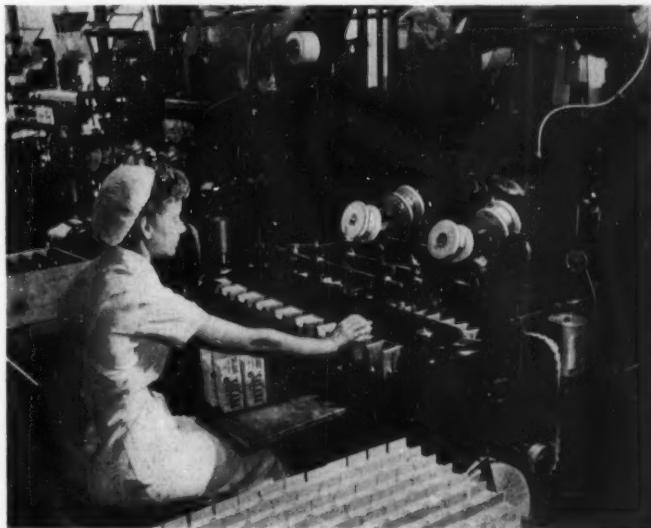
Stack count may be pre-set by a simple gear change for either 8, 10, 12 or 16 bags, depending on which is appropriate for the carton count at the time; the stacks are easily picked up with a normal finger-thumb grasp, leafed through for inspection and slipped into a carton. Because the pockets are filled in two stages, stopping first at one and then the other of the tea-bagger's delivery ports, the bags are arranged with half of each stack facing one way, half the other.

This arrangement results in more even distribution of the tea within the tea bags and in more uniform packing.

These new counter-stacker units now being added by Salada and a number of other leading tea packers were developed specifically for the tea industry and pilot models were tested for nearly two years in commercial production before being made available to the industry generally. Although this counter-stacker mechanism is applicable only to the specialized tea-bag-maker machines, the principle could be widely applied to other types of small-unit packages such as are used in the pharmaceutical industry and elsewhere.

CREDITS: Counter-stacker mechanism and tea-bag-maker machines, Pneumatic Scale Corp., Ltd., Quincy 71, Mass.

ONE OPERATOR, with the new continuous counter-and-stacker mechanism at the front of the machine, now easily handles the entire output of a standard tea-bag machine at Salada, where formerly two girls were needed to count and pack on each machine and had to be relieved frequently for rest periods to maintain their efficiency.





Elsie Daisy

FRAMING OF THE FAMED BOVINE BEAUTY

IN A BRIGHT YELLOW DAISY GIVES BORDEN'S THE

STRONG IDENTIFYING SYMBOL IT HAS LONG BEEN SEEKING

It's daisy from any angle. That's what they're saying about the new Elsie Daisy milk carton at the Borden Co. Elsie with a daisy is the new design symbol suggested for use by all operating divisions of the Borden Co. to make the most, packaging-wise, of one of America's most popular trade characters.

Elsie Borden, the bovine beauty, has tremendous consumer identification—recognized by 81% of all adult Americans. Last year her likeness appeared on more than 2 billion Borden packages. Elsie's face is Borden's fortune, but until recently the company "sold" Elsie; now with a new package symbol which may eventually be adopted for all of Borden's rapidly expanding line of food products, Elsie will sell for the company.

Elsie Daisy is a new arrangement of Elsie's head in the center of one big yellow daisy. It has already become familiar on all Borden milk cartons in the New York metropolitan area and is being adopted in other divisions throughout the country in accordance with local plans.

The new symbol is a part of a broad promotional plan covering not only fluid milk and dairy products, but the company's growing packaged grocery business. It evolved after months

of careful research that went hand in hand with the advertising department's presentation for new Borden truck designs.

This "cart-before-the-cow" study revealed, among other things, the value of truck advertising. The Railway Express Co., for example, leases the sides of its 12,000 trucks for advertising purposes. Based on field studies, each truck chalks up an average of 3,500 impressions on pedestrians per day. Multiplied by 24,000 this adds up to 84 million impressions a day, 2½ billion a month, 30 billion a year. As the various units of the Borden Co. also operate some 10,000 vehicles, Borden realized that it had an advertising medium worth nearly \$2,000,000 a year at the Railway Express Co.'s established rates—virtually free to the company, as trucks must be redecorated occasionally anyway.

A check of Borden trucks, however, showed that there was no strong similarity between its truck designs—nothing to give the instant, nationwide recognition accorded such vehicles as those used by Coca Cola, Greyhound or the Bell Telephone companies.

It was obvious that when a Borden truck needed repainting, it would cost

very little to redo it with a standard, memorable symbol, so that within a short time all Borden trucks would look alike and build up wide recognition for the symbol. At the same time, however, it was realized that such recognition of a symbol must carry right through to the point of sale on the company's packages. One was inseparable from the other.

Borden's designer began working on a new design for Elsie that would be adaptable to all types of promotional material. Previous Elsie symbols either did not have the desired attention-getting value or else were not sufficiently flexible to provide a strong, uniform design for all promotional purposes.

Elsie's head alone did not seem to have the desired impact. But it was found that, centered in a large yellow daisy, it had all the elements desired. The sunburst form of the daisy petals is a device that has attracted attention since time immemorial, providing an eye-compelling focal point with the added value of high-visibility yellow. Since Elsie Borden also has long been associated with a wreath of daisies around her neck, the symbol of the single large daisy has further appropriateness.

First divisions to adopt the new de-



IDENTIFYING COLOR for each product is used with one additional color—yellow for the daisy—on all milk packages: navy for regular milk, red for homogenized vitamin-D milk, green for buttermilk, light blue for skimmed fat-free milk, brown for chocolate milk, cinnamon for eggnog, deep green for light cream and orange for heavy cream. Daisy petals in sunburst form around Elsie's head give instant recognition to the Borden Co. products wherever the symbol is displayed.

sign were those in the New York metropolitan area, with others throughout the country following suit in accordance with local programs.

Elsie Daisy is believed to provide exactly the kind of design device Borden has long been seeking. A line drawing of Elsie printed in the identifying color of each milk product, surrounded by the big, bold yellow daisy, is unmistakable as identifying a Borden product on store or pantry shelf. The design is sufficiently flexible to allow for the multitude of variations demanded to meet local legal requirements without in any way altering the basic theme. Used against a background color on the lower half of a carton, it provides strong color identity yet allows ample area at the top face of the carton for company name and product name. A curving arrangement of the colored area also

gives movement to the design in mass display. The design is equally adaptable to both flat-top and gable-top milk cartons.

Considerable study was given to the lettering of the product names to make them easily distinguishable. Although the vertical panel demands the use of condensed characters, the lettering is made bold and clean so that product names are legible at a considerable distance.

An important part of the redesign program for the milk cartons was the selection of a basic color for each type of product. Strong colors were used in almost every case to give good contrast with the ivory color of the waxed cartonboard. In each instance the identifying color is used with only one additional color—the yellow for the daisy.

Basic colors are navy for the regu-

lar milk, red for homogenized vitamin-D milk, green for buttermilk, light blue for skimmed fat-free milk, brown for chocolate milk, cinnamon for eggnog, deep green for light cream and orange for heavy cream.

During the past few months, in areas where the new packages have been introduced, they have been announced to consumers and the trade in advertisements with a slogan, "The better the package, the faster the sale."

The success of the design where it has been used bolsters the feeling that eventually the Elsie Daisy symbol may be adopted for other products of the Borden Co.

CREDITS: Design, Frank Gianninoto, 250 Park Ave., New York. Cartons, American Can Co., 100 Park Ave., New York 17, and Ex-Cell-O Corp., Pure-Pak Div., 1200 Oakman Blvd., Detroit 32, Mich.

TAYLOR'S



WINES

THE ANCIENT ART OF THE WINE MAKER IS PROJECTED INTO
SALES THROUGH THE MODERN ART OF PACKAGING

Here and there throughout the world nature has provided the rare combination of soil and climate needed for nurturing perfect wine grapes. One of these spots—"the Garden of the Vines"—climbs the hillsides girdling Lake Keuka in the famous Finger Lakes region of western New York State.

Most of the renowned New York State wines are made close to the shores of Keuka and Canandaigua Lakes and 85% of all New York bottle-fermented champagne is produced at the southern end of Lake Keuka. In few places in all this country is nature so kind to the vines as here. And few vineyardists lavish more care and patience in the planting and tending of vines and the choosing of grapes than the Taylor family—three generations old in the ways of grapes and wine.

Much the same care is devoted to bottling and labeling, making Taylor's an excellent example of the best American practice in wine packaging.

The story of the Taylor Wine Co. goes back to 1880. In April of that year Walter Taylor, a descendant of early Colonial stock on both sides of his family, moved with his bride of a year from Tioga County, New York, to Hammondsport, Steuben County, at the southern end of Lake Keuka. The young couple made the trip by horse and wagon, carrying with them what furniture they had been able to accumulate.

In Hammondsport Mr. Taylor purchased a tract of land adjoining that of his father-in-law, George Chapman, which had on it seven acres of bearing Catawba, Delaware and Concord vineyards. During the first two years the Taylors lived in a small grape-packing building on the property and managed, by frugal living and by harvesting two good grape crops, to pay for the property during this time. Later Mr. Taylor purchased a farm



PHOTO COURTESY OWENS-ILLINOIS GLASS CO.

TYPICAL SPARK of Taylor merchandising is this new gift carton for champagne, which, with neck-holding slot in one end, doubles as a counter display piece. Printing in sepia on two sides of the carton are actual photographs of Taylor Wine Co. vineyards in the Finger Lakes region.

of 70 acres nearby and proceeded to set out 20 acres of grapes, making a specialty of Delaware and Ives, two of the finest wine grapes.

Once established as a vineyardist and a commercial shipper of grapes, Mr. Taylor turned his attention to wine making, using at first only a small portion of his harvest. Native New York State table wines were fermented and aged at his vineyard and then barreled and shipped to New York City.

As the years passed, the Taylor winery increased its fermenting and storage capacity to a point where Mr. Taylor began to purchase his neighbors' grapes. In 1895 he added a New York State port and a white Tokay wine to the line of table wines he was producing and then from time to time other wines were introduced.

Up to this time the Taylor name in connection with domestic wines was known to very few persons outside the trade. Wine dealers knew the Taylor Wine Co. as a producer of fine wines, but the average home consumer of wine who purchased in relatively small quantities had little direct contact with the Taylor name—if it were known to him at all. Obviously, it seemed to Mr. Taylor, the best way to open up new markets and to make consumers know and ask for Taylor wines was to bottle the product at the winery in the winery's own packages.

This was the beginning of the Taylor packaging program. At first there was only a small, mainly hand-operated bottling line. The bulk of the wine still went into barrels for shipment. It is likely that the present-day winery bottles more wine in a single

day than the early Taylor winery did in an entire year. But as more and more people became familiar with Taylor bottled wines, demand for them increased. New and more efficient bottling-line equipment was installed. The packaging program at Taylor was just getting under full steam when the Prohibition Amendment put a stop to all activity.

Aggressive merchandising

Possibly Taylor's would have remained a regional winery with a more or less regional market, but for the aggressive packaging and merchandising programs which were adopted in the '30's, following Repeal. Packaging and merchandising are mentioned together, because in fact they are so closely interrelated in the Taylor program that it is sometimes difficult to tell where the one leaves off and the other begins. New and novel ideas in wine packaging have given invaluable assistance in successfully merchandising Taylor wine while, on the other hand, alert merchandising has made possible a more complete utilization of Taylor's skill in packaging.

Somewhat oddly, Taylor's has resisted one packaging trend in developing its own package line. That is the common practice of creating a family identity or unity in all labels used on products of the same company. The first labels used by the company on its products following Repeal did have this family identity. But gradually Taylor's has veered away from this practice. The desirability of the traditional label "look" associated with each type of wine outweighed the argument for family resemblance.

Today all Taylor labels for different types of wine are different. Each label is specially designed for a special type of wine. The common characteristics in all labels is the name "Taylor's" in large letters, but even here the style of lettering used varies somewhat with the different packages.

Greyton H. Taylor, currently in charge of advertising and merchandising, who has made a thorough study of wine package design, says there is much to be said on both sides of the label question. While agreeing to the desirability of family identity in packaging generally, he points out

that in the case of wine his company feels that a special label for each variety lends distinction to the package and makes for quick and easy identification of the wine type by the customer. Moreover, with the name "Taylor's" printed in big letters across the top of each label, the customer is not likely to lose the brand identity, he believes.

In its constant search for packages with sales appeal Taylor's developed several years ago individual holiday gift cartons to promote gift-package sales of their products at Christmas and New Year's. Cartons were provided with windows to permit easy inspection of the bottles inside.

The holiday gift-carton idea met with excellent acceptance from dealers who found it a fine means of promoting the sale of wines during the holiday season and from shoppers who found the gift carton a solution to some of their gift-buying problems. The success of this promotion led to a question and, logically enough, to the development of Taylor's newest wine package.

The question was this: If people



LOVING CARE attends the production of Taylor champagnes. On clearing tables, thousands of bottles are held vertically and twisted daily by hand to gather sediment. Each is "candled" for clarity, as shown, before removal of sediment and corking.

NO FRENCH CHATEAU, but a busy winery in Hammondsport, N. Y., is this main building of the Taylor plant, nestled at the foot of hillside vineyard. Tunneling deep down and into the hillside are cathedral-like vaults holding immense wooden casks, as well as modern, up-to-date packaging machinery.





DIVERSE DESIGNS are deliberately used to distinguish the various types of Taylor still wines. The traditional look has been found more important than the maintenance of family resemblance in bottle labels.

buy wine in gift cartons as presents during the holiday season, is there any reason why they shouldn't buy it as gifts the year around—for birthdays, weddings, anniversaries and all special occasions? Taylor's decided that they would.

So the newest idea in wine packaging and merchandising is Taylor's year-around, individual gift box. Three of these individual gift boxes, made of corrugated board, are packed in every 12-bottle case of port, dry sherry and sauterne wines, providing an opportunity to the retailer to ar-

BACK LABELS are in accord with the most modern practice, describing each wine in appetizing terms and giving tips for its care and service.



range more effective displays and to suggest the importance of wine as a gift item.

While developing individual gift cartons, Taylor's also adopted a new corrugated shipping case. Both are outstanding in appearance and composition. Both feature a linen finish which is highly attractive in appearance while imparting a feeling of quality and dignity in keeping with the product.

Individual cartons are two-piece, single-wall slide boxes. The linen finish requires a special grade of ink in printing to assure clear reproduction. Cases have 200-lb.-test, single-wall outers with nine-cell, double-wall partitions which are separated from slide boxes by a single-wall pad. The case has special slotted top flaps, all flaps meeting, and regular slotted bottom flaps with bottom pad.

Another fairly recent packaging development by Taylor's is the use of back labels on bottles to provide product information for the convenience of consumers and, of course, promote

sales of the Taylor brand. These back labels contain a brief description of the wine and instructions for serving, as well as an account of the methods by which selected grapes for Taylor's wines are grown. More complete information on the service of wines and champagnes and their use in cooking and in mixed drinks is offered through booklets which may be obtained from dealers or by writing directly to the wine company.

Taylor's new display cases are specially designed for mass display in retail outlets and current merchandising practice is to push the "save-by-the-case" theme. The wine company is supplying retailers with two types of "save-by-the-case" cards with illustrated circulars showing how the cards may be used to best advantage with full-case displays of wine.

Another recent device is the use of large instruction sheets in bold type which are packed in each case of Taylor table wine. These give the basic rules for keeping and serving each particular type of wine. The assump-

LINEN-FINISH CORRUGATED is used for colorfully printed shipping case and for three gift cartons included in each case of port, sherry and sauterne. Gift cartons are used the year round.



tion is that consumers who keep and serve wine to the best advantage are more likely to be satisfied customers who will think of Taylor's when their next wine purchase is made. The company also has produced a number of attractive and informational booklets about wine and wine cookery which are distributed free of charge.

The original Taylor winery building, built into a hill at the foot of the vineyards in 1886, still greets visitors. Part of the old building has been converted into the handsome, modern offices of the wine company.

The old building was 50 by 50 ft. in size and was four stories tall. The first wine cellar, which is still in use, had a total cooperage capacity of 44,000 gallons. This compares with a 1,500,000-gal. cooperage capacity today, with an additional 200,000 gal. of storage capacity being added at the present time.

Unlike the 3-in.-thick redwood tanks generally installed throughout the modern cellars, the tanks in the first Taylor cellar were casks made of white oak. The largest of these early

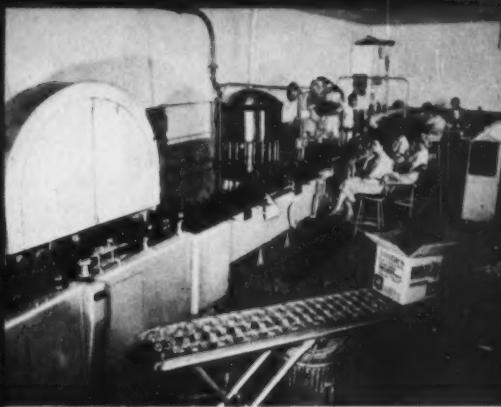
SALES EMPHASIS is on by-the-case savings. Dealers are supplied with these cards and told how to mount them in mass displays, by slot cut in top case.



Production

at

Taylor's



FULLY AUTOMATIC bottling line includes, left to right, air cleaner, 21-head filler, aluminum roll-on closure machine and straight-line labeling machine.



SPECIAL HANDLING is required for champagne. Sediment plug is removed from neck of bottle that has been frozen, gas pressure blows out frozen sediment, syrup is added, then bottle is corked.

FINAL LABELING and hand-wrapping operations for sparkling wines. Man at right is giving each bottle final "candling."

casks had a 2,000-gal. capacity. Most of them were smaller.

The modern cellars are a towering maze of fermentation and storage tanks, ranging in size from 7,000-gal. capacity to 33,000-gal. giants. One storage room alone has a total cooperage capacity of 330,000 gallons.

The Taylor laboratories play a highly important role in the wine-making operation. Here the vital control work is done. This includes the development of the special Taylor

strain of yeast for fermentation and the testing of blends for uniformity and trueness to type.

After wine has fermented and aged in redwood storage tanks or oak casks, it is pumped through sanitary Pyrex glass pipe, thousands of feet of which are used throughout the winery, to the filling line where the wine is packaged for shipment.

The Taylor bottling line utilizes the latest in automatic bottling equipment. It includes an unscrambler, an air



SCIENCE is integral to modern wine making. Control work in Taylor laboratories includes developing special yeast strains and testing of blends for uniformity and trueness to type.

cleaner, a 21-head filler, a straight-line labeler and a roll-on machine for aluminum closures.

It would be natural to conclude that fully automatic machinery has eliminated most of the hand operations in wine making, just as scientific instruments have eliminated all the guesswork in wine blending. Such is not the case. There is no short-cut to perfection in wine making and no way has been devised to eliminate many of the slow and painstaking hand methods.

For example, 252 hand operations are required in the making of Taylor's champagne. High in the darkness of the tierage section, where

thousands of bottles of champagne rest on "clearing" tables, experienced cellarmen move daily through the aisles. Their job is to twist each downward-angled bottle every day, in the manner of the ancient makers of champagne. Each bottle is "candled" (inspected) for clarity before removal of sediment and final corking. The removal of sediment, which is blown out, also involves several hand operations, as does the final wrapping of the package.

Besides operating one of the country's most modern wineries, Taylor's also grows many of the most select wine grapes on its nearly 500 acres of vineyards bordering Lake Keuka. Recently new varieties of French hybrid grapes have been planted in the Taylor vineyards. These are varieties originally bred in France by crossing the classic European wine varieties with certain of the native American species. The object of this breeding work has been to obtain vines bearing fruit like the classic European varieties but possessing the hardy vine characteristics of the Eastern American grape. Eight white varieties and six red varieties of grapes are crushed by Taylor and used for the various wine blends.

Taylor's long ago recognized, as did a number of other wine companies, that its own winery operations constituted one of the very best means of promoting its products. As a result, the Taylor cellars are visited each

year by thousands of tourists from all over the nation. Guided tours are available each weekday. Climax of the tour is always the opportunity to rest and relax at the visit's end in the winery's quaint reception room, itself an exact reproduction of a wine cellar. Here the visitor samples outstanding Taylor products, served with hors d'oeuvres prepared and tested in Taylor's own modern kitchen. As a further reminder of their visit, visitors are given copies of Taylor's recipe booklets and postcards showing scenes in the winery and nearby vineyards.

Company officials point to thousands of friends in all parts of the United States who have been won to Taylor wines as a direct result of these first-hand acquaintanceships with the winery and its products. It's a part of the alert and progressive merchandising program that, for over 72 years, has won for Taylor a respected niche in the American wine industry.

CREDITS: Bottles, corrugated gift cartons and corrugated shipping cases, Owens-Illinois Glass Co., Toledo 1, Ohio. Champagne gift carton, United Board & Carton Corp., 156 Solar St., Syracuse 1, N. Y. Air cleaner and labeler, Pneumatic Scale Corp., Ltd., Quincy, Mass. Unscrambler and filler, Horix Mfg. Co., Pittsburgh 4, Pa. Aluminum closures and roll-on closure machine, Aluminum Co. of America, Pittsburgh 19, Pa. Labels, U. S. Printing & Lithograph Co., 340 Beech St., Cincinnati 12, Ohio. Lead capsules, Rentschler & Sons, Inc., Irvington, N. J.

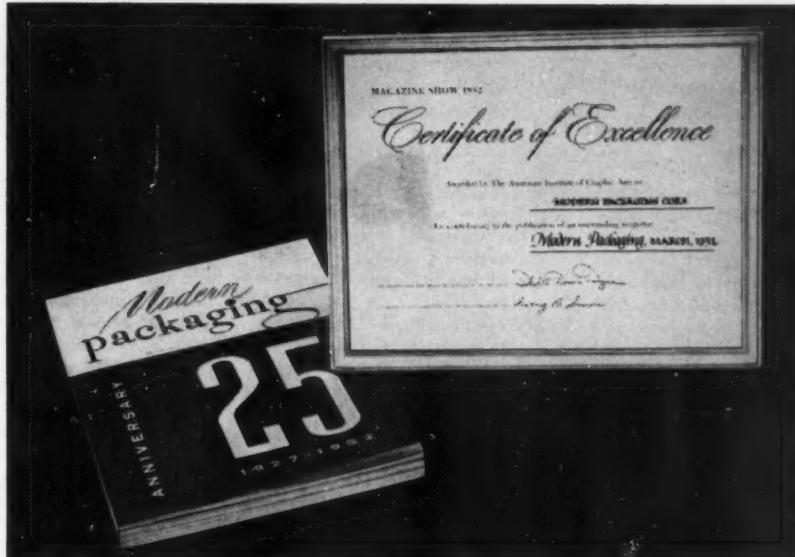
GRACIOUS HOSPITALITY to visitors is part of Taylor tradition. In this reception room, under portrait of founder Walter Taylor, visitors are served refreshments after a tour of the winery.



THREE GRANDSONS of the founder—brothers Clarence, Fred and Greyton—preside over the winery today. The bottles on the table illustrate the contrast of the post-Repeal family labels (four bottles at the left) with the diverse designs now used.



Honors for MODERN PACKAGING



One of the most coveted honors in the graphic arts field has been accorded MODERN PACKAGING for its Twenty-Fifth Anniversary Issue published in March, 1952.

The issue was one of 12 business magazines, out of 149 winners in a field of over 1,500 magazines, selected by the American Institute of Graphic Arts for a Certificate of Excellence and for hanging in the Magazine Show 1952 which opened in New York on October 15. The Institute referred to the group as "a selection of representative magazines whose artistic and mechanical accomplishments afford a criterion by which those in the industry may measure the success of their own endeavors."

MODERN PACKAGING was commended by the Board of Judges in three of the six categories in which entries were judged: Illustration and Photography; Typography and Lettering, and Cover Design. Individual Certificates of Excellence were presented to Modern Packaging Corp., as the publisher of the magazine; to Donald R. Rutherford, art director; to Arrow Engraving Co., New York, the engravers, and to Hildreth Press, Bristol,

Conn., printers. Feature of the 436-page March issue—largest in MODERN PACKAGING's history—was a special silver-bordered section of 68 editorial pages reviewing the last 25 years of progress in the various phases of packaging, as reflected in the pages of MODERN PACKAGING.

The special anniversary cover was designed by Robert Neubauer, printed by The Gallery Press on Allied Mirrogloss 80-lb. coated stock and acetate laminated by the Arvey Corp. Special interior typesetting was by Royal Typographers. The MODERN PACKAGING logotype was originally designed by Tony Stan.

The Board of Judges for Magazine Show 1952 included Dr. M. F. Agha, consulting art director; Jess Gorkin, editor of *Parade* Weekly; Richard Ellis, typographic director of Curtis Publishing Co.; Daniel D. Mich, editor of *McCall's*; James Boudreau, dean of the Art School of Pratt Institute, and F. E. Church, production operations manager of Time, Inc.

MODERN PACKAGING's sister magazine *Modern Plastics* also was among the winners, being cited for excellence in three categories.



FORTY-SIXTH OF A SERIES

LISTERINE

By the middle of the 19th century, Louis Pasteur had established his theory that germs cause disease. Joseph, Lord Lister, had demonstrated that germs could be killed with antiseptics. But carbolic acid was the only practical germicide Lister knew and carbolic acid had serious drawbacks. It burned healthy tissues, left scars and could not be used internally.

All over the world scientists began a search for non-caustic and non-poisonous germicides.

In a little office laboratory at his home in St. Louis, Mo., one Dr. Joseph Joshua Lawrence joined in the search. Quietly and persistently he began experimenting with various in-

gredients until, in 1879, he evolved the formula which, in convenient packaged form, has become known to the medical profession and to the public all over the world as Listerine Antiseptic.

In presenting Listerine Antiseptic as this month's *Packaging's Hall of Fame* nomination, MODERN PACKAGING pays tribute not only to the outstanding long-time leader in its field, but to the entire proprietary drug industry, as exemplified by Lambert Pharmaceutical Co., manufacturers of Listerine. The development of branded packaged drugs to assure the public of uniform, laboratory-controlled products with active ingredients and honest labeling is one of the brightest

stars in the packaging firmament.

Listerine Antiseptic has always been and still is the largest-selling oral antiseptic, accounting today for more than half of the total market. It is sold in more than 122 countries. The next closest competitor is reported to have only 7% of the market.

Listerine Antiseptic was one of the first packaged medicines with an ethical background to be introduced for sale over the counter. It pioneered in packaging to control accuracy and quality. It claims to have been among the first to state on the label its active ingredients, long before the Food and Drug Administration made such labeling mandatory. And as acceptance of the product grew, Lambert was one of the earliest to adopt mechanical methods of packaging and to make the advanced improvements in these installations that became a model for efficient bottling production layout. The company's mechanical achievements won an award in MODERN PACKAGING's All-America Package Competition in 1941.

At the present time the dollar sales are at a 20-year high, with this year's sales above last year's.

The beginning

In the beginning, while Dr. Lawrence was developing his formula for Listerine, he purchased his ingredients at the A. A. Mellier Drug Co. in St. Louis where he became acquainted with a young pharmacist named Jordan Wheat Lambert. The doctor and the young man had long chats about the experiments. Lambert was among the first to hear of the success of the new formula and the doctor's theories on the need for medicines manufactured and packaged in a laboratory where compounding could be done accurately.

SIR JOSEPH LISTER operating, from a painting in Lambert offices. Sir Joseph's discoveries in antiseptic surgery were the talk of the medical world in 1879, when Listerine was invented, and inspired the name.



NOMINATED TO PACKAGING'S HALL OF FAME BECAUSE:

- 72 years ago, it led the way in the development of reliable, branded, honestly labeled, packaged drugs.
- The first of its kind, it has always been the world's largest-selling oral antiseptic and holds more than half the total market today.
- It fought hard for good trademark practice and pioneered the use of packaging to control accuracy, quality and brand identity of product.
- Its bottling lines, producing 60 million packages a year, are models for the pharmaceutical industry.

instead of by the druggists and apothecaries of the day whose knowledge of drugs, stocks of ingredients and facilities for compounding were often very limited.

An antiseptic solution, carefully prepared, branded and sold in sealed bottles, would be a great convenience both to druggists and doctors, whose space for drugs in the familiar black satchel was limited.

Lambert was greatly impressed with the non-caustic properties and excellent germicidal effect of the solution which Dr. Lawrence named in honor of the famous Scottish surgeon and it was through Lambert's persistence that the new product was made so widely available in packaged form to the medical profession.

Early documents show that Dr. Lawrence transferred the ownership of the Listerine formula to Jordan W. Lambert on April 20, 1881, in an agreement by which Mr. Lambert was to pay Dr. Lawrence a gross royalty on all Listerine antiseptic sold.

Stationery used for letters dated August, 1881, shows that the business was being conducted under the name of "Lambert & Co., Manufacturing Chemists." The company was incorporated as the Lambert Pharmacal Co. in 1884, the word "pharmacal" reportedly having been coined by Dr. Lawrence as a contraction of "pharmaceutical."

"Listerine" was first registered as a trademark in the United States on Aug. 2, 1881. The incorporation of the name "Lister" undoubtedly lent prestige in a day when the great doctor's discoveries were the talk of the medical world. Lister himself sanc-



COMPARISON of oldest package of which a picture still exists with 1952 version shows remarkable continuity in appearance. Name molded in bottle has been a protection feature from the start. The 1908 Listerine bottle also had a corrugated wrap—with a corkscrew packed inside.

tioned use of his name on the product.

Jordan Lambert went to England in 1885 to seek a personal interview with Lister and to establish a British agency. Listerine had been registered as a trademark in Great Britain in 1882. Through the kindness of several physicians, including the physician to the King of England, Lambert was introduced to Sir Joseph Lister in Edinburgh. The visit was reported to have been a great success, leading to several interviews with editors of various English medical journals and the acceptance of the agency for Listerine by one of the largest and oldest drug houses in England.

Thus the Listerine formula and the name from the beginning were based

on the then-advancing theory of Lister that the inhibitory action of a mild antiseptic was sufficient to prevent many infections. Later bacteriological research has substantiated that Listerine Antiseptic not only equals the germicidal effect of Lister's 1-40 solution of carbolic acid—still recognized as the basis for the Government's FDA standard tests on the deadly test organism *staphylococcus aureus*—but passes these tests within 30 seconds, in comparison with the five-minute period allowed by the Government's specification.

Jordan Lambert took over full responsibility for the manufacture and packaging of the product which initially and until 1914 was sold only by

The family doctor illustration on this month's cover is from a Norman Rockwell painting made for Lambert Pharmacal Co.

prescription. Immediately he saw the necessity of protecting his package against counterfeiters. The first order for 15 gross of bottles which he placed with the Illinois Glass Co. (one of the predecessors of the present Owens-Illinois Glass Co.) specified that the name "Listerine" be blown into the glass, just as it appears on all Listerine bottles today—an early example of the use of a private mold to establish identity and discourage imitation.

It is reported that the glass-company officials weighed carefully the question whether they should extend sufficient credit to Lambert to underwrite the cost of the special mold. For the medical profession did not immediately beat a path to Lambert's door; he had to take it to them, with the hardest kind of personal selling. A letter which he wrote back to the St. Louis office in 1881 reported:

"Have had two or three orders for one bottle and this morning got an order from a wholesale house in Quincy, Ill., for one gross."

A few days later, he wrote: "Business is not very good, but I sold another gross to Meyer Bros. on Saturday. I am going to filter a batch this a.m. and fill up the remainder of the bottles." But the business did grow as the merit of the product became known. The earliest records available show that receipts amounted to \$21,166.24 in 1884. This was the

small beginning of the Lambert Co., now the parent organization, whose sales today are more than \$28,000,000 annually.

Within a few years after Listerine was developed, it was being tested clinically and in the laboratories in many countries. In Paris it received the recommendation of the Chémistes de L'Institut Pasteur. It was endorsed by medical journals in Britain and by professors of German universities; by the secretary of the Royal Academy of Medicine in Spain and by the then Surgeon-General of the United States Navy. Before 1900, the Pasteur Institute had established the effectiveness of Listerine Antiseptic in arresting the development of specific bacilli and literally thousands of medical authorities in the United States and abroad endorsed Listerine in standard textbooks, professional journals and in prescription practice.

Package history

Few packages have withstood the test of time as successfully as has the package which Jordan Lambert devised to meet this growing market for Listerine. The first noticeable change—outside of type clean-up jobs, a change from cork-and-corkscrew to threaded closure and label re-arrangements to meet mandatory requirements—is in preparation stages now. It probably will involve the addition of a broad stripe around the wrapper

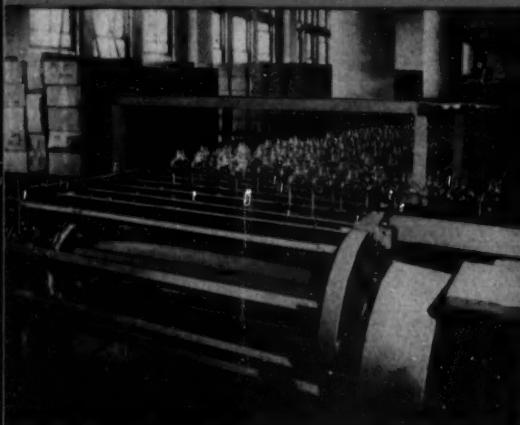
to emphasize bold lettering of the trade name—a change that has been necessitated by the trend to selling of drugs in self-service stores and the resultant need for greater emphasis on brand name.*

The first package—well designed in keeping with the ethical character of the product—was a simple Boston round bottle with the trademark molded in the bottle, to which was affixed the black-and-white label of distinctive lettering so widely recognizable today. On the wrapper, from an early date, was printed a list of the active ingredients: thymol, eucalyptol, methyl salicylate, menthol, benzoic and boric acids, dissolved in a 25% solution of alcohol. The first bottle was sealed with a cork, then wrapped with flexible corrugated board, with corrugated disks inserted at each end and overwrapped with a green-brown kraft paper, secured with adhesive end labels, giving the familiar cylindrical shape. A wire corkscrew was enclosed with each package to facilitate initial removal of the cork and for subsequent re-use of the cork as a stopper.

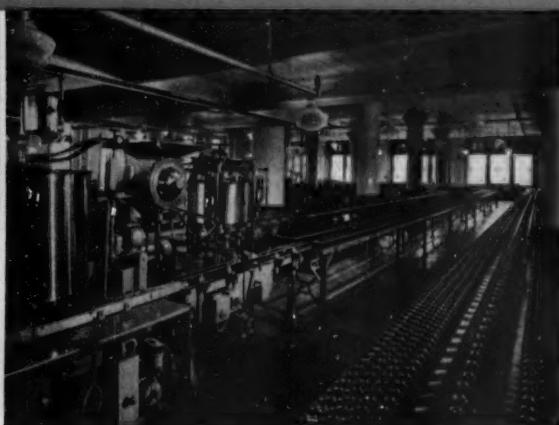
The corks and corkscrews were a part of the package assembly until 20 years ago, when the development of threaded plastic closures and equipment for applying them, as well as new liner materials, permitted the

*See "Back to the General Store," MODERN PACKAGING, Oct., 1952, p. 85.

Modern production lines turn out



WASHED BOTTLES emerge from dryers on special conveyors that carry them to rotary filling machine.



FILLED AND CAPPED Listerine bottles are discharged on long conveyor tables, where they are given careful inspection.

adoption of an efficient private-mold phenolic closure with vinyl liner.

Although the Listerine Antiseptic package has changed little in appearance, the company has been continually improving its quality and has taken an active interest in promoting better packaging generally. Its present executive vice president, Joel Y. Lund, was one of the founders and a three-term president of the Packaging Institute.

Stronger, lighter-weight, clearer glass used today not only saves shipping weight, but shows up the clear amber color of the product to better advantage. The use of waterproof adhesives has improved the appearance and sticking properties of the labels. Such questions of package quality, which might be minor considerations for most companies, are matters of primary concern at Lambert.

Why does the company still stay with the "old fashioned" corrugated wrap and overwrap? The advisability of changing to a conventional folding carton has been considered many times, but each time it was concluded that the cylindrical wrap had become too valuable as a trademark to be discarded. It is an excellent protective package from the standpoint of preventing breakage in shipment. Lambert makes approximately 50,000 separate shipments each year, but its loss and damage claims amount to less than

five hundredths of one per cent of the value of the shipments. And, contrary to normal expectation in Lambert's case, it would be considerably more expensive to change to cartons because of the simplicity and low cost of the materials now used and because over the years the company's special wrapping equipment has been developed to a high degree of speed and efficiency.

Production

The first packaging, of course, was done by hand. Average production in 1887 was three gross per day. The equipment consisted of a small tank and a tube with a clamp to control the flow of the product into bottles. In 1891 bottles were still being filled by hand. Some time after the turn of the century came a single-file bottling apparatus with the bottles moving on a belt and being filled from a spigot as they passed. The next improvement was a rotary filler, the bottles moving onto and off the filler by means of a conveyor belt. Eventually a labeler was added.

But all this time the bottles were wrapped by hand. It was not until 1927 that the company installed fully automatic wrapping and labeling machines for all sizes of Listerine bottles. At that time new equipment was put in operation in the St. Louis plant and shortly thereafter a Jersey City plant was opened which utilized

the most modern techniques in the bottling and handling of drugs.

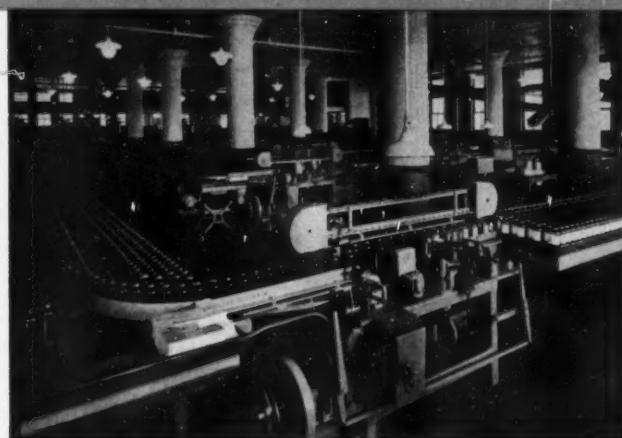
Four sizes of Listerine Antiseptic are packaged now: 14 oz., 7 oz., 3 oz. and 1½ oz. The operations for each size consist of bottle washing and drying, filling, capping, inspection, labeling, second inspection, wrapping and packing. The first four operations function as a unit, with the discharge onto long inspection and storage conveyors which bring the bottles to the proper point for labeling and wrapping.

Labeling and wrapping operations are laid out at right angles to the flow of bottles on the conveyors, with each production line ending up so that supplies can be brought to each machine without interfering with the operation of another. The layout also permits changes to be made on any production line without affecting any other size. Labels are electrically spotted to center them under the Listerine name mold. The packages are inspected for label appearance and tightness of cap before passing to the wrapping machines.

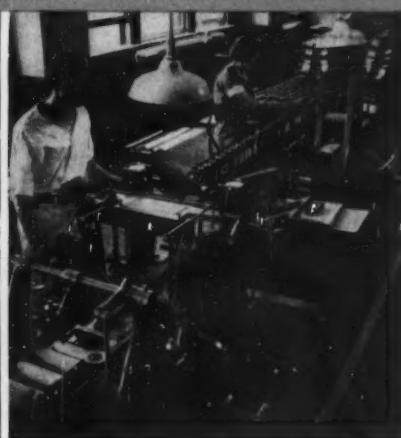
Only the two larger-sized packages are protected with the corrugated wraps and disks. The smaller sizes are simply wrapped in brown paper and packed in conventional type of shipping cases.

Production with this set-up averages 25,000 to 30,000 bottles per size per day in each plant and capa-

50,000 bottles every day



LABELERS are controlled by electric-eye mechanism to spot the labels precisely under the Listerine name molded into the bottle.



SPECIAL WRAPPING equipment applies corrugated wrap, end disks, outer wrap, end labels.



TWO FAMOUS EXAMPLES from Listerine ad series feature themes of social acceptance. These appeals were to become classics of national advertising that literally multiplied sales volumes, affording brand recognition which persisted through the years.

city is something over 60,000,000 bottles a year.

Listerine was originally used in surgery the same as Lister used carbolic acid, but its mild, non-caustic effects led physicians to experiment with its use for the treatment of many conditions in the cavities of the body. Its good reputation in the beginning was thus enhanced by clinical experience. Little was known in the beginning about test-tube methods, because bacteriology had not yet been developed as a science.

There comes a time in the history of many drug products when a remedy which has been proved both safe and successful may be offered for sale direct to the public. Lambert Pharmacal Co. decided to branch out into the proprietary drug field in 1914.

Backed by increasing advertising, the familiar packages continued to gain acceptance with the public and sales went over a million dollars a year for the first time in 1917 and have been gaining steadily to the present enviable position.

Advertising and promotion

Continued laboratory research by Lambert has steadily widened Listerine's reputation as an all-purpose antiseptic and each new claim has been

vigorously pushed by the company in advertising campaigns that have become classics of American advertising. The bad-breath campaign ("Even your best friend won't tell you") is perhaps the most famous of them all.

Currently, Listerine advertising is amplifying the halitosis theme with the striking claim that Listerine is four times better than chlorophyll in the prevention of bad breath.

Like most products that have become outstanding leaders in the packaging field, Listerine has been strongly backed by advertising from the very beginning. Early records show that when Lambert's sales were only a little over \$20,000, he was spending around \$5,000 for ads in medical journals and drug publications. Today the annual budget for national magazines, radio, etc., runs between \$2 and \$3 million.

Listerine advertising was an outstanding pioneer in the use of the self-improvement, social-acceptance themes which have been so profitably taken up by hundreds of other national advertisers. It put the word "halitosis" into Americans' everyday vocabulary.

The Lambert company has a unique set-up for handling its advertising. Its agency is Lambert & Feas-

ley, which was originally founded by Gerard Lambert and with which Lambert Pharmacal Co. still has corporate connections. Lambert & Feasley today, however, has outside billings that are even larger than those that are placed by the Lambert Company.

In addition to extensive advertising support, Listerine has always had the backing of an aggressive sales organization.

From the company's beginning, in an effort to create an atmosphere of dignity and high ethical standing for his product, Jordan Lambert employed as detail men to contact the medical profession "young college-bred men who were perfect in manner, in speech and dress, the like of which had never been seen before or since. They were the embodiment of Beau Brummel and Chesterfield, wearing black frock-tail coats, top hats, black Ascot ties and had all the 'savoir faire' and 'savoir vivre' of a French diplomat."

Such trappings became unnecessary in a later era, but a large part of the product's success is due to continued detail work and educational programs undertaken. The company became an early proponent of fair-trade practices, having been a pioneer in establishing minimum prices long

before fair-trade laws were enacted in most of the states and by the Congress.

The history of Listerine Antiseptic is a particularly good example of the endless measures that must be taken to protect a trademarked, packaged, proprietary product.

The Listerine formula is not patented; therefore it does not and never has come under the classification of a patent medicine. Its protection is provided only by the registration of the name "Listerine" as a trademark. Lambert can prevent infringement on the use of the name Listerine Antiseptic and has done so assiduously. The formula was entered under the name of "Liquor Antisepticus" in the U. S. Pharmacopeia (U.S.P. VIII) in 1905 and in the National Formulary (N.F. IV) in 1916, both of which formulas are substantially the same as Listerine Antiseptic. The consumer may have these formulas made up by prescription today—but they will cost him considerably more than a bottle of Listerine Antiseptic, without the assurance of a rigidly controlled standard product.

Like all famous products of worldwide distribution, Listerine has had its share of package imitators. As early as 1893 company investigators bought so-called "Listerine" from 479 Chicago stores; of these samples only 251 proved to be genuine Listerine Antiseptic. For years the company maintained an "intelligence department" to protect trademark rights by securing evidence against violators. The campaign was so successful that there is little trouble on this score

today. But the company preserves a collection of some 800 imitations that were spotted and eliminated.

The Lambert Co. spends many thousands of dollars annually in bacteriological and analytical chemical research to try to improve the character of the product it packages as Listerine Antiseptic and to substantiate, not only with its own research, but with that of numerous independent laboratories, the claims it makes in its advertising.

The laboratory tests are then followed further with practical tests and observations of the product in use by panels of hundreds of persons.

The fame and worldwide acceptance of Listerine Antiseptic led naturally to the creation of other products under the same name which are currently being sold by the Lambert Pharmacal Co.

The Lambert company has several divisions: The Pro-phy-lac-tic Brush Co. of Florence, Mass., which produces Pro-phy-lac-tic tooth brushes, Jewelite combs and hair brushes and Prolon plastic tableware (and also molds other plastic items on a custom basis); the John Hudson Moore Co. of New York, producer of the Sportsman line of de luxe men's toiletries, and the Harrower Laboratory, Inc., a subsidiary, producer of ethical pharmaceuticals. The headquarters of the Pharmacal company are still in St. Louis, not far from the spot where the first bottle of Listerine was produced.

Packaging annals contain few such clear-cut examples of the growth of a great business success from well-

founded and well-maintained faith in a trademarked name on a package.

CREDITS (principal current suppliers):
Bottles—Owens-Illinois Glass Co., Toledo 1, Ohio; Diamond Glass Co., Royersford, Pa., and Fairmont Glass Works, 1301 S. Keystone Ave., Indianapolis. **Labels**—Gugler Lithograph Co., Harris and Smelser Sts., Milwaukee, Wis. **Caps**—Owens-Illinois Glass Co. and Pro-phy-lac-tic Brush Co., Florence, Mass. **Cap liners**—Armstrong Cork Co., Liberty St., Lancaster, Pa., and Irvington Varnish & Insulator Co., 6 Argyle Ter., Irvington 11, N. J. **Corrugated wraps and disks**—Hinde & Dauch Paper Co., 407 Decatur St., Sandusky, Ohio. **Package inserts**—Alco-Gravure Div., Publication Corp., Baltimore, Md. **Brown wraps and end labels**—Beckett Paper Co., Hamilton, Ohio (through Graham Paper Co., 1014 Spruce, St. Louis, Mo.). **Printer**—Buxton & Skinner Printing & Stationery Co., 306 N. Fourth St., St. Louis, Mo. **Corrugated boxes**—Gaylord Container Corp., 111 N. Fourth St., St. Louis 2, Mo., and International Paper Co., Container Div., 220 E. 42nd St., New York. **Adhesives**—Arabol Mfg. Co., 110 E. 42nd St., New York; The Borden Co., Chemical Div., 350 Madison Ave., New York; National Starch Products Co., 270 Madison Ave., New York; Princeton Sealing Wax Co., Princeton, Ill., and Universal Shellac & Supply Co., 540 Irving Ave., Brooklyn. **Washers, caps, filters and belt conveyors**—U. S. Bottlers Machinery Co., 4017 N. Rockwell St., Chicago 18. **Labelers**—Pneumatic Scale Corp., Ltd., 77 Newport Ave., Quincy 71, Mass. **Bottle wrapping machines**—F. B. Redington Co., 110-112 S. Sangamon St., Chicago 7. **Roller conveyors**—Alvey Conveyor Mfg. Co., 9301 Olive St. Rd., St. Louis 24.

RELATED PRODUCTS
include Listerine shaving creams, tooth paste, tooth powder and H. V. Fungicide and Germicide.





BOOTS with gold cuffs hold purse bottles of Dermetics perfume, hang from miniature fireplace display.



COLOGNE DUETTE of two popular fashion fragrances—Woodhue and Aphrodesia—is being presented by Fabergé in this elegant gold and white set-up gift box.



JEWEL BOX of simulated leather etched in gold, a gift for little girls, has a swinging tray holding bath mitt filled with dusting powder; Tinkerbell toilet water, hand lotion, shampoo soap fit in box.

The little cosmetic package



FRANCE sends a crystal Lalique flask that forms half a sphere; the other half holds Lancôme's "Sphere Magique" perfume. Package doubles as a tree ornament.

The growing trend toward the smaller cosmetic gift package is further indicated by this year's holiday collections.

The old "set boxes" containing a whole collection of items in matched fragrances are almost extinct. Today practically every leading house is including a wide selection of "little packages." Sometimes they may be just a flacon of perfume or a lipstick done up (with a novelty twist) as a stocking stuffer or tree ornament. Or they may contain two or three related items, such as face powder and perfume, solid colognes in several fragrances, manicure items, men's shave accessories, perfume and toilet water in matching fragrances.

Almost all of these new "little packages" are in popular price

brackets, the majority of them ranging from \$1 to \$5.

All kinds of decorative packaging materials are used to achieve luxury effects—transparent containers, molded plastics, folding cartons, vinyl, leatherette and fabric pouches, aluminum foil—but there appears to be a marked renewal of interest in the use of set-up boxes, which are so admirably suited to this type of packaging and offer endless possibilities for distinctive and beautiful design treatments.

The examples illustrated on these pages are only a few of the hundreds which are being offered to American shoppers this year, but they are representative of Christmas packages which apparently are winning high favor on today's toiletries and cosmetics counters.

FRAGRANCE WARDROBE is a new idea in perfumery packaging, making wide use of the set-up box. Charbert (left) calls a set of Breathless and Fabulous eau de toilette and their match-mates in perfume "Two by Two." Corday merchandises the unique "Dash and Dot" ensemble—a dash of toilet water when at home; a dot of perfume while on the go. In a handsome hinged box, Helena Rubinstein "Perfume Set" contains stick cologne for the purse, liquid cologne for the dressing table and perfume for the evening bag.





DESK AND TRAVEL KIT by Harriet Hubbard Ayer is made of white vinyl plastic, with tray holding six different cosmetic items. Ayer's die-cut, turquoise, foil-covered Christmas tree shows a new way to dress up cologne stick for holiday selling. Tree sleeve slips off and the stick is ready for purse use.



NOVELTY appeal for purse vial of Early American Old Spice is given by paper angel.

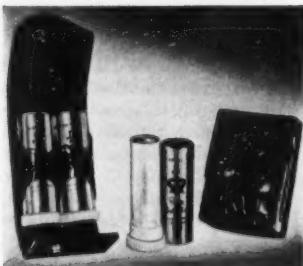


DUO of DuBarry powder and lipstick gets regal setting in foil-covered hinged box.



RE-USABLE drawstring bag—clear vinyl in front, chartreuse in back, bound in black—holds Jean Naté soap and bath lotion in polyethylene squeeze bottle for traveling.

FOR MEN there are many attractive shave-cream and lotion combinations. Yardley puts these grooming essentials in a multicolor-patterned gold box with snap lock. Seaforth uses a racing theme for its Daily Double box in red and gold.



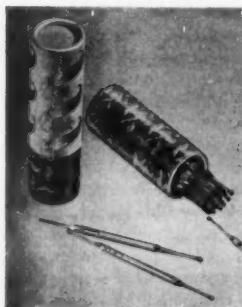
PURSE CASE of simulated red alligator holds two Matchabelli solid cologne sticks, lipstick size, each in a polished brass container.

24 SNIPS, each holding a single application of Lentheric Tweed perfume, in purse cylinder.

TRANSPARENT boxes show off to advantage distinctive containers like the Gourielli "Five O'Clock" cocktail shaker duo.

POPULAR favorite back again this year is this molded triangular polystyrene box packaging Northam Warren's Cutex manicure preparations.

TULLE bag reveals new Rochas glove soap by Roger Fare—with tee stand for drying balls of soap.



In the parlance of modern art, a mobile is one of those curiously suspended aerial sculptures from which hang disks, triangles, spirals and all manner of forms that move in perfect balance with the slightest currents of air.

From this seemingly non-objective design in modern art galleries has come a new form of commercial art which during the last two years has gained considerable success as a new type of point-of-sale display material in the retail store.

The new displays are made of several lithographed paperboard parts of varying shapes suspended on strings or wires in a manner that sets them in balanced motion with the ordinary movement of air in a room. Thus no mechanical devices are required to obtain almost perpetual motion. And suspended from ceilings they make use of a great deal of space formerly wasted in the average store without competing with other display space, such as counters, floor stands or windows.

Other reported advantages include: much longer life than certain other types of displays, wider possibilities for combining numerous selling features in a single coordinated display, economical shipment and easy installation.

Within a year these commercial mobiles have emerged from the novelty class. More than 20 national advertisers as well as a variety of local firms have already used them. The Hydrox Corp. (Sealtest ice cream) was one of the first users in the packaged-goods field and today other such users include Ar-Ex Cosmetics, Elgin National Watch Co., House for Men, Inc., Pfeiffer Brewing Co., Joseph Schlitz Brewing Co. and National Chemical Mfg. Co. for Satin Luminall Paint.

Each display problem is studied to make each moving part of the mobile capable of carrying a strong sales message in words, color and form. The parts are shaped to "flow" into each other as the display revolves, effecting the "interweaving" action that is so intriguing to the on-looker.

Design and color scheme, of course, may be planned to complement a company's advertising theme and often reproductions of the packages can be portrayed on the moving parts of the unit.

For example, the Ar-Ex Cosmetics mobile display calls attention to hypo-

Free-motion



SWAYING PIECES in balanced motion with the slightest current of air quickly attract the shopper to the advantages of Satin Luminall paints.

allergenic properties of the product on the top major piece, while the lower suspended pieces illustrate different products in the line: soapless shampoo, foundation lotion, chap cream, superfatted soap, on each of which is carried an illustration of the package.

Satin Luminall Paint is promoted with a mobile which has the trade name on one piece, a reproduction of the package on another, an illustration of a hand holding a paint brush on a third with the message "One coat covers," while two suspended pieces say, "The synthetical rubber paint sensation" and "You can scrub it." In motion this free-motion unit, hung over the paint counter, is a quick eye catcher.

The Elgin watch display emphasizes brand, special features of the watches and price, with a suggestion to buy for graduation, birthdays, anniversaries.

A mobile for Schlitz combines a series of asymmetrical balanced pieces carrying the famous slogan and other sell copy: "The beer that made Mil-

waukee famous: first in quality, first in flavor, first in sales." All of these are arranged to accent a focal egg-shaped piece on which the eye is drawn to the Schlitz trademark.

Pfeiffer Brewing Co. uses another technique by using a series of mobile pieces, each of which illustrates a Pfeiffer package—the small beer bottle, the can and the quart size—arranged with cut-outs of the company's popular trade character and appropriate short sales messages.

The idea for these mobile displays was originated about three years ago, but no units were introduced commercially until after nearly a year and a half of experimental work on methods for suspending the various free-moving parts and for producing the mobiles in quantity so that they could be priced competitively with other display materials.

In October, 1950, after designing and building innumerable models, the developers had a unit they felt solved the problems and was easy to produce. First reactions to what seasoned display men considered "dingle-dangle" materials.

display

MODERN ART FORM—THE MOBILE AERIAL SCULPTURE—
BECOMES A POWERFUL POINT-OF-SALE MERCHANDISER



PACKAGE RECOGNITION is emphasized by separate pieces picturing various Ar-Ex hypo-allergenic cosmetic packages.



COMBINED SELLING features of Elgin watches are coordinated in one mobile unit with emphasis on each.

gle" gimmicks, however, were not good. It was necessary to hang a number of the dummed-up samples in advertisers' offices to prove that this commercial adaptation of an artistic form had real merit. It did not take long for advertisers to realize that the mobiles were more than a novelty.

Dealers were receptive to displays which used otherwise wasted space. Because of the colorful and unusual effects, they were willing to put them up. And once up, it was found that dealers were reluctant to go to the trouble of taking them down, with the result that the mobiles have a much longer useful life than many other types of displays. One salesman, for example, checked dealers' stores more than a month after the mobiles were shipped and found that more than 90% were still in use.

And one enthusiastic user claims a gain of as much as 749% in sales of a product promoted by the use of a mobile ceiling unit.

CREDIT: *Display-mobiles*, Berger-Amour, 107 W. Wacker Dr., Chicago, Ill.

STUDIED SHAPES of the pieces arranged to "flow" into each other have magnetic effect in attracting the eye to Schlitz trademark.



LONG LIFE is accorded to mobile displays which make use of ceiling space which otherwise might be wasted and does not compete with counters, floor stands or windows of retail stores.

Modern
packaging

DESIGN



Stepped-up self-service design

The New England Confectionery Co., Cambridge, Mass., maker of the long-established Necco candies, has introduced new package designs for three Necco products. Those for Canada Mints and Canada Wintergreens did so well in test marketing that they were adopted for national distribution considerably before the expiration of the six-month testing period. Simplicity is the key characteristic of these neat little folding cartons of lithographed paperboard, which represent months of study and experiment. They stand out on self-service or pick-up counters, yet maintain the quality feeling insisted on by the manufacturer. Currently, the new 10-cent king size of Necco Chocolate Peppermints was introduced. Here, too, simplicity and clarity of design enhance the high visibility of the red and white package, promising a quality product in the tasty bite-size mints.

CREDIT: Cartons, *Forbes Lithograph Mfg. Co., Boston, Mass.*

A Scotch whisky carton with authentic Highland fling

The development of a distinctive gift carton for Chivas Regal Scotch Whisky that affords full protection without additional interior packing has been announced by Chivas Bros. Import Corp., New York. The carton is of 35-pt. board specially calendered to 30 pts., varnished, embossed and treated by a special process which enhances its appearance and protective qualities. Lithographed in seven mellow colors and gold—intended to express the smoothness and age of the 12-year-old Scotch—each side of the sturdy folding carton gives an important feature of the Chivas Regal story. A facsimile of the handsome bottle with its label appears on the front panel. The back panel contains an embossed reproduction of an oil painting of Robert Bruce leading the Battle of Bannock, topped by the slogan, "Scotland's Prince of Whiskies." The picture has good shelf-distance and display visibility.

CREDITS: Carton designed and supplied by Chaspec Mfg. Co., Greenwich, Conn., and printed by John Laird & Sons, Ltd., Glasgow, Scotland.



HISTORIES

Pumpernickel slices in a foil wrap

High product visibility and strong product identification are targets of new laminated foil wraps for Nordmann's pumpernickel bread, made by Nordmann's Bakery, Cincinnati, Ohio. The glitter of foil is given a subtler sheen by printing on the mat side of the foil. Cellophane laminated to the printed side adds to the sparkle of the five-color package. The bakery considers the package especially appropriate because of the strong protective qualities of the laminated material, which assures product freshness. Striking illustrations featured on the wrap suggest different ways of using the bread, made from Nordmann's original formula. Package face bears the slogan, "Separate slices with knife," below the reproduction of a blue tray bearing the brown slices surrounded by yellow cheese cuts.

CREDITS: Printed wrap, Shellmar Products Corp., Mt. Vernon, Ohio, using foil by Cochran Foil Co., Louisville, Ky., and cellophane by E. I. duPont DeNemours & Co., Wilmington 98, Del.



Chocolate bars stay fresher in new transparent carton wrap

Chunky Chocolate Corp., New York, has shifted from a printed chipboard cover to a cellophane overwrap for its boxes of "Chunkys." The new heat-seal wrappers, said to be the first of their kind to be used by a maker of chocolate bars, were adopted after joint research by Chunky and the wrap supplier. It was found that on display the wrap gave unequalled visibility to the appealing inner package while greatly improving protection against loss of flavor and change in weight in storage, where it reduced moisture absorption by two-thirds. The sealed cellophane also protects the candy against absorption of foreign odors and against insect infestation during distribution, the company reports. In transport trips made between New York and Chicago to test the durability of the new wrap, every shipment is reported to have made the round trip damage free.

CREDIT: Heat-sealed cellophane overwrap, Olin Cellophane Div. of Eucarta Paper Corp., subsidiary of Olin Industries, Inc., 270 Park Ave., New York.



*Modern
packaging*

DESIGN



Laminated pouch for aspirin

Armour Laboratories of Armour & Co., Chicago, have something entirely new in the way of an aspirin package for their recently developed "Crystar," a powdered aspirin manufactured especially for children. The new package is a laminated foil pouch which unitizes the crystallized powder into one-grain quantities, thus reducing the possibility of overdosage. Crystar is compounded in crystallized powder form on a base that produces a stable preparation instantly soluble in water. The laminated-foil pouch amply protects the product from attack by moisture, the supplier reports. The tiny packets are machined as double units, with perforations separating one grain from its twin. There are 12 units in the individual cartons. The neat counter display carton holds a dozen packs.

CREDITS: "Metalam" pouches, The Dobeckmum Co., Cleveland, Ohio. Individual and display cartons, Ace Carton Corp., Chicago.

Houseware sets in a new transparent package



Super-market distribution has prompted adoption of a flexible transparent package by Federal Tool Corp., Chicago, for its plastic houseware sets. Made of clear, tough Pliofilm, the new packages allow the items to sell themselves, at the same time providing protection against handling, pilferage and possible separation of component items from the sets by shoppers. In all, the company is packaging nine of its fastest-selling sets in a wrap tailor made to each set. For example, the Camel Caddy salt and pepper set is completely covered and the package crimp sealed at the top; all sets containing small parts are completely overwrapped. Larger-item sets like those for syrup and mustard are packed snugly in a base wrap which allows the tops to protrude from the pack and are banded into place.

CREDITS: Printed packaging, Milprint, Inc., Milwaukee, Wis., using Pliofilm by The Goodyear Tire & Rubber Co., Inc., Akron, Ohio.

HISTORIES

New beer label stresses initial

The Weber Waukesha Brewing Co., Waukesha, Wis., has adopted new labeling for its Weber Waukesha brand beer which represents a startling change from the old labeling. The new design was adopted after a successful outdoor-advertising campaign which featured the "big red W." The bold, poster-like initial establishes rapid brand identification and markedly improves visibility ratings of visual sales aids, the company discovered. The modernized label is designed in red and white. A narrow border of gold and silver outlines the aluminum foil labels. The new Weber can, which replaces the old crown-closure can, has the new design lithographed on two sides, standing out sharply against a jet black background.

CREDITS: Bottle labels, Northwestern Lithographing Co., Milwaukee. Bottle caps, Bond Crown & Cork Co., Wilmington, Del. Bottles, Obear-Nester Glass Co., E. St. Louis, Ill. Cans, Continental Can Co., Inc., New York.



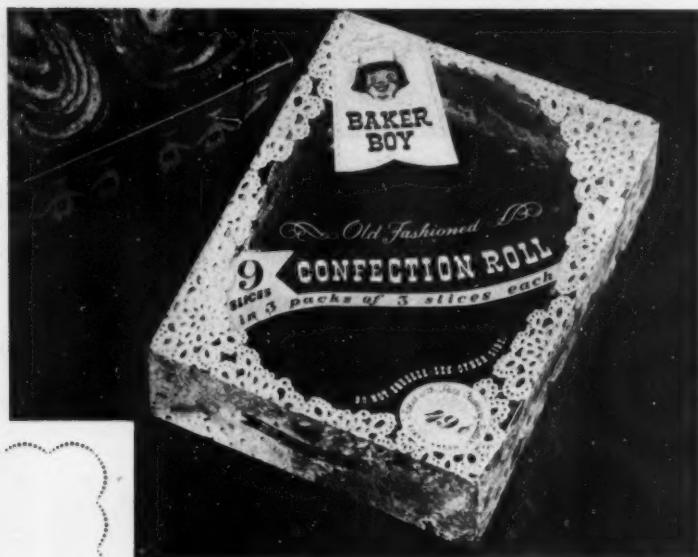
Seasonings in new packaging attire

A new package is solving the problem of moisture protection for Lawry's Seasoned Salt samples. Made of laminated foil, it proved effective in preventing the salt from absorbing moisture or becoming hard and lumpy. The new sample package is brightly printed to tie in with the modern, clean-looking design of Lawry's packages and national advertising. Garlic spread and seasoned salt are packaged in glass jars, fitted with screw-cap metal closures and with wrap-around paper labels. Company name, trademark (a circle depicting a 19th century top-hatter) and format are the same for both labels. The salt jar has an inner polyethylene shaker disk.

CREDITS: Jars, Glass Containers, Inc., San Francisco. Closures, I. F. Schnier & Co., San Francisco, and Phoenix Metal Cap Co., Brooklyn, N. Y. Labels, H. S. Crocker Co., Inc., San Francisco. "Metalam" laminated foil packages, Dobeckmum Co., Cleveland. Polyethylene disk, Wheeling Stamping Co., Wheeling, W. Va.



TATTED-LACE design rotogravure printed on cellophane over-wrap for Baker Boy cake recalls old-fashioned custom of wrapping home-baked cake in a hand-made lace napkin. In background are individually wrapped pieces of cake with overwrap removed.



The old-fashioned look

While consumers have accepted and have even come to insist upon the practical advantages conferred by modern, automatic packaging techniques, package designers and users have come to suspect that there are times when ultra-modern, automatic packaging can produce an appearance which reflects the machine a bit more than is desirable for a given product. Appreciation of, and preference for, stark utility in design—whether the article in question is a piece of furniture, a textile product or a package—is probably a highly sophisticated taste shared by few consumers.

Thus the packager is sometimes faced with the need to introduce a feeling of "hand-made-with-loving-care" into the appearance of his package, while still utilizing his modern, mechanized and high-speed packaging line.

As the accompanying illustrations

show most clearly, this need to temper the severity of a modern, mechanically produced package has been met with a high degree of success by Baker Boy Industries, Inc., Los Angeles, in the new package for its Old Fashioned Confection Roll, a coffee and dessert cake. The photos reveal the extent to which clever use of package printing can camouflage the fact that the package received its "loving care" at top speed and from automatic machinery.

What the designer of the new Baker Boy package has done is to hark back to the days when "grandmother" used to present the choicest products of her bake oven wrapped in a spotless white napkin of hand-made lace, crochet or tatting. (And from the point of view of presenting the product in its most effective setting, let it be noted that "grandmother" was no slouch.) Baker Boy obtains the tatted-lace effect by roto-

gravure printing on the package's cellophane over-wrap, using a design which, though it obscures very little of the carefully arranged contents of the package, softens the square corners and straight lines. Visually softening the package's corners not only avoids a machine-made look, but from some angles it actually makes the package look larger. The lace also accents, by comparison with its white filigree, the dark, rich, flavorful-looking colors of the baked goods inside.

Although obtaining the hand-made or old-fashioned look is sometimes a matter of introducing random irregularities into an article's finish, this does not apply to the Baker Boy overwrap. Considerable accuracy of register and application of the latest techniques of color overprinting on transparent material were required to obtain the desired effect. The "lace" itself is carefully shaded in a three-dimensional effect and care in the register both of the

HAND-MADE LOOK OF BAKER BOY PACKAGING IS ATTAINED BY MODERN COLOR-PRINTING TECHNIQUES, HIGH-SPEED WRAPPING MACHINES

lace and of the other elements in the design is needed to avoid destroying the quality appearance. This controlled accuracy has to be maintained through five color-printing steps: white, yellow, pink and red, plus the black halftone for the shading effects which give the "lace" its three-dimensional appearance.

Baker Boy's new package design carefully retains important features developed step by step over a period of time.

First, the company simply banded the sliced roll with printed paper and overwrapped it in plain cellophane. This was followed by adoption of a printed cellophane overwrap which allowed more leeway in label design, yet hid less of the cake. Then printed Pliofilm was used to obtain maximum protection with the single wrap. The next step was to separate the nine-slice roll into three three-slice portions, each separately wrapped in cellophane; these cellophane-wrapped pieces were placed on their sides in a printed paperboard tray with a printed cellophane overwrap. This spread-out arrangement displayed

much more of the attractive cut surface of the cake and made the package look like it held more product. The three inner wrappers also preserved freshness of the product after the outer wrap had been opened. Package copy took advantage of this last feature to proclaim "Long lasting—coffee and dessert cake that lasts for weeks."

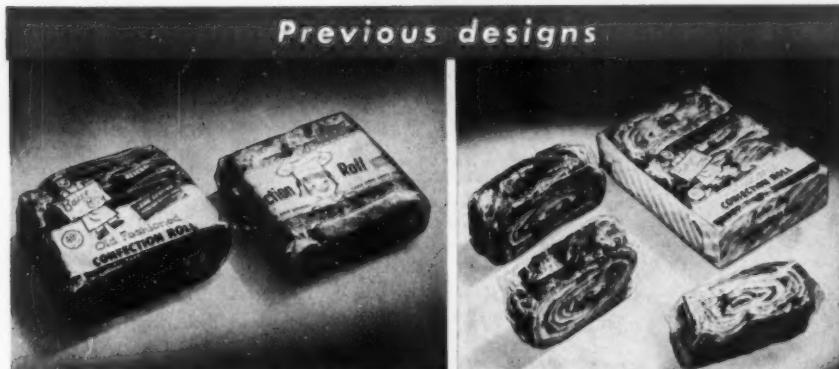
The successful package that evolved in this fashion is the one which now has received the old-fashioned design treatment, losing none of its virtues in the process.

Packaging of Confection Roll at the Baker Boy plant is a high-volume process, beginning with machine slicing and wrapping of the cake into individual three-sliced heat-sealed units. Three of these units go into an unglued corner-locking tray which is automatically set up. The filled trays then pass on to a wrapping machine where the printed cellophane overwraps are fed from a continuous roll and accurately positioned to center the design over the open face of the tray.

Baker Boy Industries, as the details

of its rotogravure-printed package suggest, is not a small-scale operation; the company distributes in its Los Angeles home territory with its own fleet of trucks and through local distributors over an area which extends from Washington to Texas and as far east as Kansas City. Companion items to the Confection Roll now include a Date-Nut Confection Roll, Cake Crumbs and a pound cake, with other items expected to be added under the Baker Boy label in the near future. The company's rapid growth, particularly in the last three years, has attracted the attention of the business press which reported its activities this spring.

CREDITS: Baker Boy package design, Walter Landor & Associates, San Francisco. Printed cellophane overwrap, Milprint, Inc., 4200 N. Holton St., Milwaukee 1, Wis. Printed folding tray (Klik-Lok), National Folding Box Co., Inc., New Haven, Conn. Three-slice inner wrap made on a Campbell wrapping machine made by Hudson-Sharp Machine Co., 1201-07 Main St., Green Bay, Wis. Overwrapping machine, Hayssen Mfg. Co., 13th St. & St. Claire Ave., Sheboygan, Wis.



EARLY PACKAGES for nine-slice Baker Boy Confection Roll: plain cellophane wrap over a printed paper band (right), printed cellophane wrap (left).

SOME IMPROVEMENT was offered by printed paperboard tray holding three individually wrapped units with a printed cellophane overwrap.

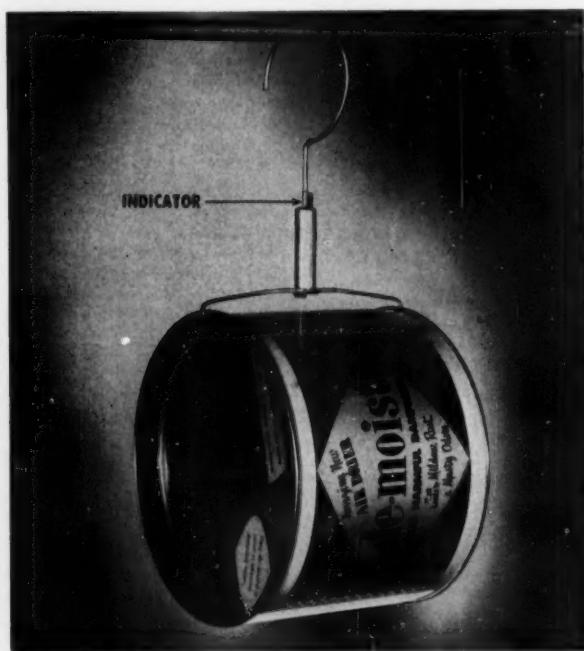
PRESENT TRAY is printed with the Baker Boy trade figure to retain brand identity of product when printed cellophane wrap has been removed.



Tell-tale De Moist

SPRING SCALE IN HANGER OF NEW CAN WEIGHS MOISTURE PICK-UP

AND SHOWS RED WHEN IT'S TIME TO REJUVENATE THE HOUSEHOLD DESICCANT



RED MARK SHOWS because of weight of moisture that the desiccant has absorbed; it serves as a warning to the housewife that she must dry out De Moist crystals in oven to restore their efficiency.

That the customer happily will pay more for outstanding functional and convenience features of a new package is indicated by the experience of the G. N. Coughlan Co., manufacturers of "De Moist," a desiccant which absorbs and removes moisture from the air in closets and other places in the home where excessive dampness is a problem.

For a new metal De Moist package cleverly equipped with a self-indicating scale device built into a hanger arrangement to tell when it's time to regenerate the desiccant, consumers are now paying \$1.69 in comparison to \$1.29 for the same product in its former package. And

the new package is reported to be far outselling the old one.

The new package came about as the result of a market study showing that the former package for De Moist was proving inconvenient when placed in actual use by the consumer. The former packaging consisted of a cotton bag holding the pellets of De Moist which in turn was packed inside a foil-laminated paper bag. The foil-laminated bag provided the moisture barrier necessary to prevent the desiccant from absorbing moisture until placed in actual use.

The procedure was to remove the cotton bag of De Moist from the foil-laminated bag and hang it in the

closet or wherever it was needed. When the desiccant becomes saturated with moisture, it must be placed in a moderate oven for about 20 minutes, to be dried out for reuse. This can be done over and over again. Because the cotton bag would scorch and burn, the contents had to be poured into a metal pan to be placed in the oven, then poured back into the bag after removal from the oven. This was inconvenient.

Another poor feature of the bag was that it provided the user no means of telling when the De Moist was fully saturated and should be regenerated.

When these problems were turned over to a package designer, a study was made to determine how the product was used, how it was displayed and marketed, and how it was influenced by competitive products.

These investigations, of course, revealed the need for a more convenient package—one that the user could place directly in the oven for 20 minutes at 450 deg. F. to regenerate the contents without removing them from the package. It was also found desirable to incorporate in the package some means of indicating to the user when the contents were saturated and needed regeneration. Urgently required, too, was a package that would lend itself more effectively to display. The bag package, of necessity, had to be stacked so that only the irregular ends and uneven faces were seen. It had little attraction for women who would take pride in their closets, kitchens, etc., and there were no adequate surfaces for pointing out selling features or use instructions.

The designer analyzed a number of materials which might give the proper protection to the product, along with the other requirements. The selection finally narrowed down to several forms of lithographed metal cans. A metal container would withstand the high temperatures, thus offering the needed convenience for

handling. It also provided good opportunity for decoration and display.

Final selection was a friction-lid metal container, about the size of a pound coffee can. The side walls are all-over perforated with tiny holes to permit the transfer of moisture. Inside the can the De Moist crystals are protected until use in a heat-sealed polyethylene bag. When putting the product into use, the consumer removes the cover, opens the polyethylene bag, pours the crystals into the empty can and replaces the lid. The package is then completely ready for use. When regeneration is necessary, she simply places it in the oven. There is no bothersome transfer of crystals.

In working out the ingenious details of the indicator scale device, it was learned that one of the properties of the product was its ability to absorb its own weight in moisture—no more, no less. With this information, it was possible to develop an extremely simple spring scale that is part of the metal hanger arrangement attached to the top of the can. From the time the De Moist is first hung up for use, as on the clothes pole in a closet, it starts to absorb moisture from the air and, of course, increases in weight until it is fully saturated. At this stage the scale arrangement in the hanger reaches a point from the pull of the container so that it shows a red mark—and the consumer then knows it is time to bake the De Moist in the oven.

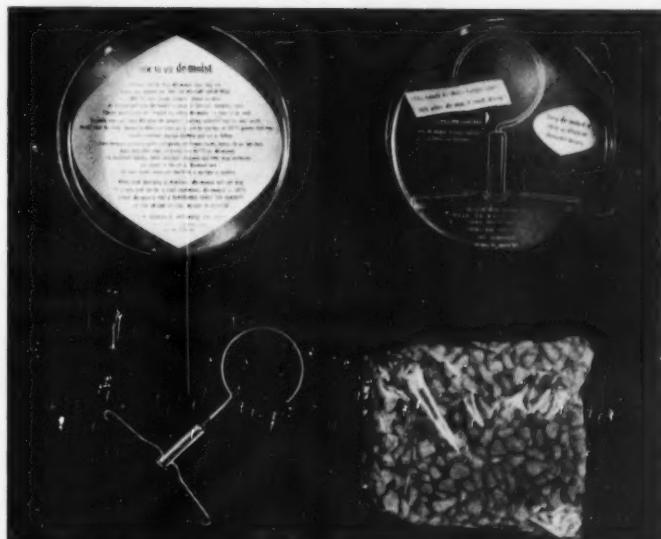
Complete directions for use are lithographed on both top and bottom of the can, including the end to which the scale hanger is taped, describing the use of the indicator. The can is red, yellow, blue and white.

The new package was introduced to the trade with some apprehension because of the increased price necessitated by the improved package, but buyers, distributors and dealers were immediately enthusiastic. It has been given prominent and favorable display and sales of the new package have jumped so fast the manufacturer has had difficulty in keeping up with the increased orders.

CREDITS: Package development and design, Gerald Stahl, 12 E. 46th St., New York. Metal container, Atlantic Can Co., 120 E. 44th St., New York. Scale-hanger device, Scoville Mfg. Co., Waterbury, Conn. Polyethylene bag, Milprint, Inc., 4200 N. Holton St., Milwaukee, Wis.



OLD PACKAGE was an unattractive cotton bag from which contents had to be removed for dehydration and then replaced.



COMPONENTS of package include crystals in protective polyethylene bag, which is discarded upon use, and scale-hanger device taped to top of can. Top and bottom of lithographed can carry complete instructions.

Industrial award winners

SELECTION OF THE BEST SHIPPING PACKAGES IN SEVEN CATEGORIES

HIGHLIGHTS SEVENTH ANNUAL INDUSTRIAL PACKAGERS' MEETING

A record-breaking entry list highlighted this year's National Protective Packaging and Materials Handling Competition, staged as a feature of the seventh annual meeting of the Society of Industrial Packaging and Materials Handling Engineers. Formal announcement of the winning entries in the seven categories of the competition and of the packages receiving

the two special awards given annually was made on the second day of the four-day meeting, which took place at the Coliseum, Chicago, Oct. 13 to 16.

Classifications in which entries were judged included corrugated or solid fibre boxes; nailed wood boxes and crates; wirebound boxes and crates; cleated panel boxes; general; export

packages, and materials handling. In addition, there were special awards for interior protection and for the best approach to rendering export packs pilferproof. Awards in each classification were determined by separate teams of qualified judges, with Alvin S. Roberts, Insurance Co. of North America, Philadelphia, serving as general chairman of the competition.



1. Corrugated or Solid Fibre Boxes. This entry also was given the Irving J. Stoller award for best interior box construction.



2. Nailed Wood Boxes and Crates.



3. Wirebound Boxes and Crates.



4. Cleated Panel Boxes.



5. General Group.

Following its practice of several years' standing, the SIPMHE this year arranged for an industrial packaging and materials-handling short course, which was held Oct. 13 to 16, inclusive. This year's course, staged in cooperation with the College of Engineering, Department of Mechanical Engineering, University of Illinois, Extension Division, was devoted to all phases of packaging and materials handling, with special reference to industrial applications. Among the speakers participating in the intensive course were University of Illinois faculty members, outstanding protective packaging and materials-handling representatives, and members of the Armed Forces. At the opening session of the short course, attendants were greeted by Stanley Price, SIPMHE president, who is affiliated with the Hawthorne Works of General Electric Co., Chicago. A record attendance was racked up at this year's short course program. R. C. Cragg, Gould-National Batteries, Inc., Chicago, was general chairman of the Short Course Advisory Committee.

A concurrent feature of the seventh annual meeting was the Industrial Packaging and Materials Handling Exposition, staged in the main hall of the Coliseum Oct. 14, 15 and 16. Participating in the exposition were more than 100 manufacturers and suppliers of protective shipping containers of all types, materials-handling equipment and attachments, cushioning and other special interior-packing materials, packaging reinforcement equipment and materials, and numerous other types of products, equipment and services of interest to the industrial packaging and materials-handling

engineer. C. J. Carney, Jr., managing director of SIPMHE, served in a similar capacity for the short course and exposition management, with A. C. McGeath, American Boxboard Co., Chicago, as floor manager of the exposition.

A feature of special interest at the exposition consisted of three special military packaging exhibits. They included Air Materiel Packaging, arranged by the Packaging Div., Air Materiel Command Headquarters, Wright-Patterson Air Force Base, Dayton, Ohio; Army Quartermaster Packaging, arranged by Containers Div., U. S. Army Quartermaster Depot, Food & Container Institute, Chicago; and Army Ordnance Packaging, arranged by U. S. Army Engineer Research and Development Laboratories, Engineer Center, and Ft. Belvoir, Va.

Those eligible to submit entries in the packaging competition included individuals (not companies or organizations) who were not connected with the manufacture and/or sale of protective packaging or materials-handling products, materials, equipment or supplies. Companies desiring to participate were permitted to present their applications through a regular employee of the organization. All entries were judged on such basic criteria as product protection, conformance to carrier requirements, ingenuity in application of materials and methods, ease of handling, economy and utility.

Winning entries in the various categories of the competition were as follows:

Group 1—Corrugated or Solid Fibre Boxes: First award to Ralph Hawes, Radio Corp. of America, Cam-



DOUBLE WINNER. Aircraft rivets seal the cover of this fibre drum pack for airplane chronometers, which placed second in the General Group and won coveted Jackson Award for best pilferproof packaging in 1952.

den, N. J., for a precipitation screen container. The same container also was adjudged winner of the Irving J. Stoller award for the package incorporating the most outstanding achievement in the development of interior packaging. Constructed of corrugated board, plywood panels and cable clamps, the package was designed to protect the fragile wire screen used to prevent dust collection on the mirror incorporated in theater-type television

(This article continued on page 209)



6. Export Packages.

7. Materials Handling.



Packaging Pageant



2



NEW



4



1 The decoration of these polyethylene bottles for Airtona air fresheners, products of the Henry Thayer Co., reaches near the top of the bottle to mask the empty space needed for headroom in filling squeeze bottles. A "full look," the company believes, is vital for heavy sales in self-service super markets, chief outlet for the product. Bottles, Plax Corp., Hartford, Conn.

2 The formed acetate piece in this interesting package for the British Addis 99 Denture Brush, product of Addis, Ltd., curves to its highest point over the head of the brush. In forming, a continuous $\frac{3}{4}$ -in. flange is left on the 0.007-in. acetate. This flange fits into a rectangular cut-out in the upper face of the 3-by-13-in. card to hold the brush in position. Open ends of the card are stapled. Package, British Cellophane, Ltd., London.

3 Since Siu Bakers & Confectioners redesigned their package for Minon's confections, accounts they were unable to sell before now carry the product. These new outlets have increased sales. The new design gives a richer, quality appearance to the product. Package, Gordon Cetons, Inc., Baltimore, Md., using DuPont acetate.

4 A 23% increase in sales rewarded Henry Heil Meat Packers for changing their bacon package to this eye-catching four-color-printed cellophane envelope that is quickly filled on an automatic packaging machine, yet has the look of a machine-wrapped package. Envelope, Shellmar Products Corp., Mt. Vernon, Ohio. "Speedpak" machine, Modern Equipment Co., Greenville, S. C.

5 The new six-bar overwraps for D. L. Clark Co.'s Clark Bars give instant identity and make it clear that six bars are enclosed. The rotogravure-printed cellophane wrap features a cut bar in a white bull's eye as the "Center of Attraction." Unprinted areas of wrap permit visibility of kiddie cut-outs printed on the bottom of the tray. Package, Milprint, Inc., Milwaukee.

6 Three years of successful promotion of hand tools as gift items prompted Fayette R. Plumb, Inc., this year to Christmas wrap five of its fastest-selling items. Hammer shown comes in a colorfully printed 450 MST cellophane pouch. Pouch, Crystal Tube Corp., Chicago.

7 Elkay's Dip-Off silver cleaner, sold by Rexall Drug Co., is packaged in glass bottles with applied color labeling. One dip of the silver into the bottle removes tarnish. The

5



baked-on label stays fresh and does not rub off throughout the long lifetime of the product. Bottle and labeling, Brockway Glass Co., Brockway, Pa.

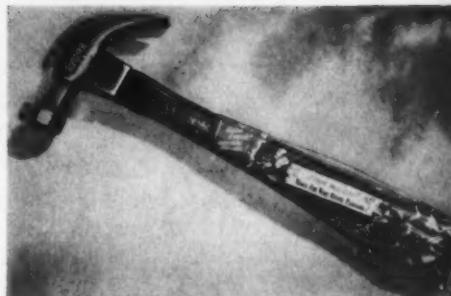
8 Dobeckman's Household Foil, newest addition to The Dobeckman Co.'s line of paper and film products for the housewife, comes brightly packaged in a folding carton printed in blue, yellow and red, which carries out family resemblance to the company's other retail items. Carton, Robert Gair Co., Inc., New York.

9 Harriet Hubbard Ayer's entire line of cosmetic creams and lotions now appear in these new white jars and bottles with decorations of 22-carat gold and black baked on. Jewel-like in their elegance, they are suggested as decorative re-use containers. Jars and bottles, T. C. Wheaton Co., New York. Ceramic decorating, Cerigraphic, Inc., Newark, N. J. Jar closures, Gibson Associates, Inc., New York, and Colt's Mfg. Co., Hartford, Conn. Bottle caps, Armstrong Cork Co., Lancaster, Pa., and Formold Plastics, Chicago.

10 Re Umberto Olive Condite, an olive-salad appetizer produced by Strohmeier & Arpe Co., now comes in a completely new package design. Sealing band and closure carry sales copy, while a heart-shaped design on the closure provides space for price marking. "Duraglas" jar and metal closure, Owens-Illinois Glass Co., Toledo, Ohio. Foil label, Cameo Die & Label Co., New York. Cel-O-Seal band, E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.

11 The new window carton for Grant Laboratories' ant-control insecticides gets better display position for the product and has resulted in definite upgrading of sales, the company reports. Carton, Oakland Folding Paper Box Co., Emeryville, Calif., using Eastman Kodak Co.'s Kodapak.

6



7



8



9



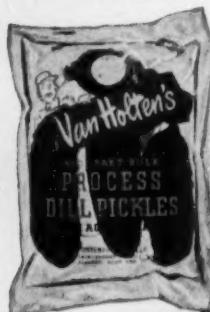
11



10



It licks the moisture problem



Pliofilm seals moisture

PLIOFILM seals pickles and sauerkraut in their own brines, frankfurters in savory sauce, without leakage or moisture loss. That's because **PLIOFILM** is liquid-tight — ideal for any product whose quality depends on preserving the moisture content.



Pliofilm seals moisture

PLIOFILM keeps powders dry, yeast fresh, spark plugs from rusting, because it prevents moisture absorption. It's perfect for ready mixes, dried fruits and many other kinds of products whose quality depends on keeping moisture out.

— both ways!

in



out



MOISTURE control means *quality* control. That's why there's nothing like PLIOFILM for protecting the quality, appearance and shelf life of your product.

PLIOFILM seals air-, moisture-, liquid-tight. It keeps wanted moisture in—unwanted moisture out. But that's not all.

This unique film has many other advantages. It's tough and durable, with strength to hold heavy goods. It's hard to tear, split or puncture—won't shatter or run. And its natural transparency assures a sales-making display.

If you've a moisture problem—or any problem—in packaging, why not consult the Goodyear Packaging Engineer. He'll work with you and PLIOFILM, help design a package precisely suited to your needs. Write him at Goodyear, Pliofilm Dept., Akron 16, Ohio.

We think you'll like "THE GREATEST STORY EVER TOLD"
Every Sunday — ABC Network



Good things are better in

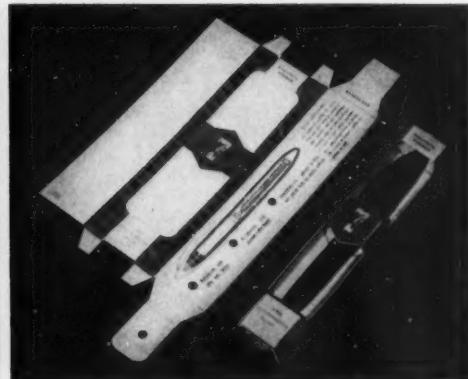
Pliofilm

3-way protection against air, moisture, liquids

Pliofilm, a rubber hydrochloride—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio



PRISM-SHAPED PACKAGE for sunglasses is folded from one piece of printed paperboard. Folding produces double side and end walls. Bows of glasses are held firmly in inner slots.



SCORED, DIE-CUT package for Safir-7 pen cradles and locks pen in place. Use instructions and diagram on bottom are visible through transparent overwrap.

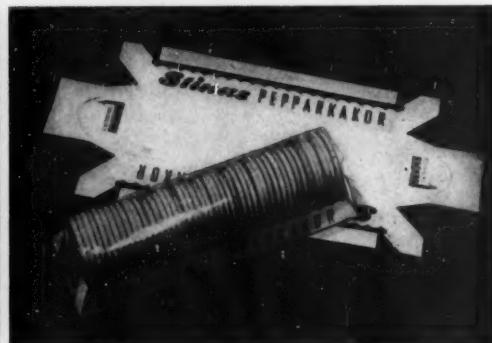
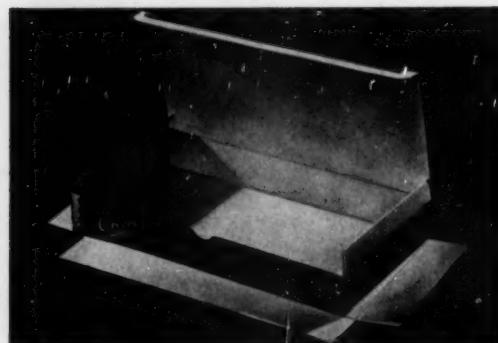


STAPLED BODY simplifies construction of the Orebro "Sorté" box for biscuits. The "Ambrosia" box is of similar construction, but has glued tabs instead of stapling.

BISCUIT BOXES use machine wrapping for some styles of wafers and round biscuits having high per-capita consumption. Fancy mixed varieties of cookies (top left) are hand filled into four-color-process offset paperboard boxes.

SWEDISH

TRANSPARENT OVERWRAP is combined with sturdy based paperboard folding tray for Stinas ginger cookies. Tapered-base box design is currently popular in Sweden.



Swedish packagers keep a sharp eye on American packaging progress, with results that show up on many Swedish store counters and shelves. However, the passage of ideas and techniques between the two countries is not necessarily a one-way affair. American packagers can find the stimulation of a fresh viewpoint in the Swedish packages, particularly when the designs combine the gay, traditional folk-art colors and motifs with the clean-cut modern styling that characterizes the best of European poster and package art.

Sweden's market for packaged goods and the packages that have been developed to serve that market bear a closer resemblance to American conditions and packages than might be expected from a nation with a population of only 6,500,000. This is probably the result of the high average standard of Swedish living, which produces a market resembling ours in many respects, although so much smaller. Swedish packaging is characterized by high standards of product protection and a thoroughly sales-minded, display-minded approach to package decoration and design. The

Swedes have been quick to adapt to their requirements such techniques as heat sealing and visibility packaging, both for foods and for soft goods.

At the same time, the limited size of their market means that for all but a comparatively few items such as bread and processed canned foods, packaging runs are too small to make a high degree of mechanization an economic possibility. The most typically Swedish packaging, perhaps, is to be seen in folding-box designs which combine high display appeal with construction which permits fast, efficient setting up and filling by hand. Working in a land where wood pulp is a plentiful basic raw material, Swedish package designers have learned to secure product protection, crisp design and a wide range of effects through careful use of paperboard alone.

The packages shown here illustrate current application to a variety of products of the one-piece folding-box construction in which Swedish suppliers excel.

The majority of the packages illustrated use a sulphite cartonboard to which is laminated a bleached sulphite paper which permits lithographic

package decoration of high quality. Most of the packages are fabricated from a single piece of this material, scored and die cut to permit rapid setting up by hand. Many of the Swedish packagers who use this type of box employ young part-time workers for the setting-up and filling operations.

Box construction design is, therefore, aimed at speed and simplicity of set-up in the hands of unskilled employees. In achieving this aim, the Swedish designer has a valuable aid in the heavier weights of board which can economically be used there.

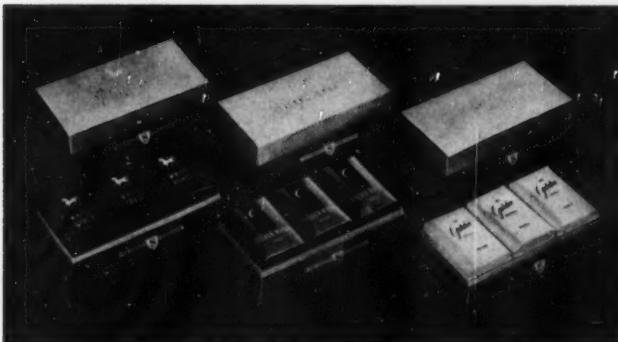
The economy-minded American packager might suggest that much paperboard could have been saved in some of these packages through use of a considerably lighter weight of board, used with glued and reinforced corners and, in some cases, overwrapping.

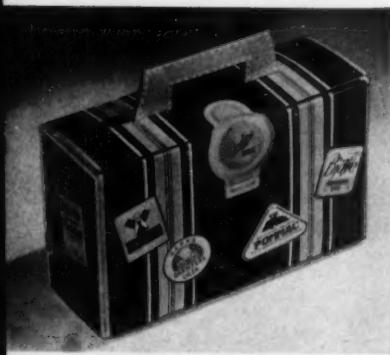
It might also be suggested that glued-in inner liners could have been used in some of the boxes instead of the more lavish double folding of the board to show the paper-mounted side of the extra fold as a finished lining. A similar point might be raised with

DESIGN

THE SWEDES MAKE GOOD USE OF THEIR HIGH-QUALITY
PAPERBOARD IN FOLDING BOXES WELL DESIGNED FOR
HAND PACKAGING OPERATIONS

LUXURY LOOK for high-quality toilet soap is obtained by the careful use of printed and embossed paperboard. These photographs show the completed three-piece boxes and components of a single box. The embossed top is special carton board, while the inner tray and base are of sulphite cartonboard that has a laminated surface of bleached sulphite paper.





ADVERTISING VEHICLE for manufacturers of other products is this suitcase-shaped package for alphabet cookies. Trademark owners pay for the travel-sticker space on a "circulation" basis; advertising income may permit a reduction of cookie price.

regard to the use of extra folds of board to hold, cradle or cushion the contents.

The correct answer is probably that the extra weight of board used in these boxes represents efficiency in a land where wood pulp is plentiful and where packaging is primarily a hand operation. And as the packages shown here illustrate, it is possible to create a wide range of visual effects and product protection features if sufficient ingenuity is applied to the cut-

ting and scoring of a single piece of paperboard.

One interesting example of current Swedish design is the folding box for Swing-ups sunglasses illustrated. It is reported that the box proved even sturdy enough to be used as a carrying case for the glasses and a sample of the package received here was actually thrown about the office as hard as possible without becoming unfolded or sustaining visible damage. Interesting details of this well-thought-out box include slots which hold the bows of the glasses, the double-wall construction when folded which effectively cushions the glasses and the die-cut finger catch-flap to identify the opening tuck and make opening easy. Colors are a grayed maroon with warm gray and white accents.

The package for the Safir-7 ball-point pen again shows paperboard in use for a one-piece container which forms a suspending cradle for a comparatively fragile item. The cradling members, die cut and scored from the top of the box, do not quite reach the bottom. The bottom panel is used for complete instructions and a diagram of the pen's mechanism. A transparent, heat-sealed overwrap completes the package.

Per-capita consumption of biscuits in Sweden is very high; thus mechanization of packaging has been possible to a considerable extent among bakers. The Orebro wafers and round biscuits are machine filled direct from

the ovens, receiving a wrapper of grease-resistant paper, an offset-printed cover and a heat-sealed, moistureproof, transparent overwrap. Some of the packages make use of the semi-transparency of the greaseproof paper to permit some degree of visibility of the contents.

The more expensive packages of assorted fancy crackers, sandwich biscuits, etc., are hand packaged in strong paperboard boxes decorated with four-color lithography. This is lithography of high quality, with considerable taste, subtlety and sophistication shown in the handling of the colors. The design on the large Sorté package which appears at the upper left in the middle photo on page 124 uses a photograph for the biscuits, teapot and plate of butter balls, but the shadows which give depth to the design are drawn in with typical lithograph crayon-shading effect. Colors used are red, yellow, brown and blue; a second yellow is substituted on packages which have no blue areas. The body of the Sorté box is fastened to the top-and-bottom piece with a pair of staples.

A high-visibility package for Stinas Pepparkakor (ginger cookies) makes use of a full transparent overwrap. The Swedish packagers make extensive use of cellophane bags for unit packaging of many items, including a number for textiles, hosiery and lingerie. The sloping-sided tray seen here is a shape particularly favored by this particular Swedish designer and it may be seen in several packages of this group; here it offers good visibility to the lettering and provides a stable protective base for the cookies.

The use of folding boxes for a luxury product is illustrated by the toilet-soap packages for Seger Parfumerie of Stockholm. The use of English names for toiletries, as for sports products, is frequently seen in Sweden. The packages, however, show a typically Swedish application of fine heavy-weight paperboard to produce a quality effect. The result is a non-glued, three-piece folding box which can be rapidly set up by hand, but which duplicates the appearance of heavier container constructions. The cover of this box, overprinted in solid color with the name and design in white and embossed, is made of art printing cartonboard; the slope-sided base and inner tray are made of sulphite (This article continued on page 202)

SWEDISH SUPERMARKET illustrated below reveals that package display requirements are basically the same as those in the United States.



PHOTO COURTESY AMERICAN-SCANDINAVIAN NEWS EXCHANGE

Pre-packaged furniture

MAKER OF CHROME DINETTE SETS FINDS THAT PACKAGING LOWERS COSTS,

BOOSTS SALES AND PUTS FURNITURE IN THE GIFT CLASS

Pre-package an entire dinette table and set of chairs? Well, why not? Officials of the Douglas Furniture Corp., Chicago, a major producer of dinette furniture, thought the idea had merit and gave the green light to a packaging program. They felt that this departure from customary practice in the furniture industry offered a number of advantages to distributors as well as to the ultimate purchaser. The enthusiastic response of buyers at the recent Summer Furniture Market in Chicago and sales results to date have verified the wisdom of their decision.

Under Douglas' new "package deal," a complete chrome dinette set including a table and four chairs ready for easy assembly after delivery, is shipped in two attractively printed corrugated shipping boxes. Accenting the gift theme, the boxes are designed with light green backgrounds overprinted in dark green and black. The background pattern includes a repeat of the Douglas name in open script and the company's Kitchen Master trade name set off by a flowing, ribbon-like streamer.

The fact that the colorful shipping

PACKAGING at factory is fast and efficient. Four chair frames, straight off production line, are nested in carton. Interior carton containing chair seats and backs and illustrated assembly instructions goes on the top.



TABLE AND FOUR CHAIRS were delivered in the two factory-sealed corrugated cartons. Ease of assembly, without tools, makes item practical as a gift. Pre-packaging conserves warehouse and shipping space, assures delivery of unmarked furniture and carries maker's name to user.

boxes encourage purchase of the dinette sets as gifts is but one of the advantages of the new packaging program, as pointed out by Morton R. Cohen, vice president in charge of sales. In addition, dealers save handling and shipping costs by stocking dinette sets already packaged and ready for delivery. And in Douglas warehouse areas, dealers can dropship direct to consumers outside their own delivery zones.

The compactness of the packaging, with units disassembled, not only conserves warehouse space, but also permits use of greater payloads in distributors' trucks. Pre-packaging also does away with the handling of bulky assembled tables and chairs and eliminates delivery damage. Through cumulative savings on freight, storage, delivery and assembly, the dealer is able to sell the sets at more-competitive prices.

From the standpoint of the ultimate purchaser, a point in favor of the new program is the fact that customers are assured of receiving "factory fresh" merchandise. Any possible complaints

that the furniture has been used for floor samples are automatically eliminated. In 98 out of 100 cases it has been found that customers will assemble the sets themselves, saving the distributor the cost of assembly. Illustrated assembly instructions are provided with each set.

In the Douglas plant the metal frames are first inserted in the principal chair-shipping container and the seats and backs, packed in a separate carton, are placed on top. The step-by-step assembly instructions, showing how the units may be easily put together without tools, are printed directly on the inner carton. Use of the inner container for seats and backs insures adequate protection so that no supplementary blocking or cushioning is required. The dinette tables are shipped in a third style of corrugated container which holds the legs and top. All container closures are made with cloth-backed pressure-sensitive tape.

CREDIT: Corrugated shipping containers, Stone Container Corp., 4200 W. 42nd Place, Chicago 32, Ill.



Speed Products Co.'s three-dimensional paper-board house is a self-vending merchandiser that promotes home use of the Swingline Tot-50 stapling kit, traditionally associated with office work. Cartoons illustrate home uses. In the display are 12 kits. As one is removed, another drops into place from hidden stock. Display, Merit Displays Co., New York.



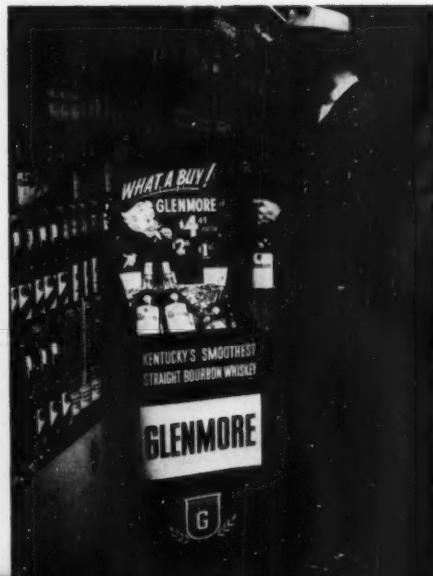
Rilling Dermetics Co.'s eye-catching counter display holds 12 tubes of new Butex—hair reconditioner long used by professional beauticians, now made up in a new formula and packaged in handy single-application tubes. The display promotes retail demand for professional and home treatments. Display, Warner Bros. Co., Bridgeport, Conn. Tube, cap, Sheffield Tube Corp., New London, Conn.



Valentine & Co. is introducing a new line of washable paints—Valspar Velvet—with this appealing point-of-sale display card which shows how easy the paint is to clean. Shoppers see at a glance that ugly wall marks could be washed off the new surfacing by a baby. Six color blocks at base of the card are used for promotional themes. A can of the paint is reproduced at upper left. Display, The Warren O. Woodward Co., Long Island City, N. Y.

This fluorescent-printed floor stand highlights Glenmore in any liquor store. It consists of a sleeve of 0.015 white Shasta tag board that fits over three Glenmore cases, the top case cut to slant in front. Back card is of 0.050 display board. Both are silk screened with maroon background, black and fluorescent chartreuse, with white stock showing through. The unit is 53 in. high, 15 in. wide, 12 in. deep. Display, Veltone Co., San Francisco. "Velva-Glo" fluorescent inks, Radiant Color Co., Oakland, Calif.

DISPLAY





Display containers for Stylecraft Frocks' new Sew-Easy bring the product effectively before shoppers, telling at a glance that here are all the makings for a smart, new fashion frock. The compact unit holds the "makings" packaged individually in printed cellophane envelopes. (See *Modern Packaging*, July, 1952, p. 83.) Display, Hinde & Dauch Paper Co., Sandusky, Ohio. Envelopes, Milprint, Inc., Milwaukee.



This new floor bin builds milk sales for Sealtest (National Dairy Products Corp.) by tying in related products. Its design is patterned after the Sealtest Homogenized Vitamin D milk carton. The unit is 18 in. square, 38 in. high and holds the equivalent of 3 doz. doughnut packages. Display, Fuller Displays, Long Island City, N. Y.



Jno. H. Swisher & Son, Inc., uses this novel display for its Yuletide promotion of King Edward cigars. The full-color printed counter unit ships flat and is die cut and scored so that an actual box of cigars may be slipped in back of Santa's legs and the chimney top. Two price spots—for boxes of 50 and boxes of 20—appear on the chimney. Display, Peeples Displays, Inc., Jacksonville, Fla.



This three-dimensional display may be used to promote any one of Wilson Bros.' three different Skipper sports shirts for men. Three different die-cut and scored sections—one for each type of shirt—come with each display. The cut-out at the side for holding an actual packaged shirt is so constructed that either of the two different sizes of shirt package may be accommodated. Display and window carton, Milprint, Inc., Milwaukee.



THE PAPER CUP promised wide distribution of yogurt, but first Dannon chemists had to produce a yogurt that would ferment in the container at proper temperatures. Currently, 30,000 are shipped daily.

Millions in yogurt

DANNON MADE THE PRODUCT SUIT THE PACKAGE, BROADENED ITS MARKET

AND NOW DOES A BUSINESS OF \$1,500,000 A YEAR

In 1942 Dannon Milk Products Co., New York, was producing yogurt—a cultured milk food of custard-like consistency—at the rate of about 350 pint containers a day. The current rate is nearly 30,000 a day, representing a gross business of \$1,500,000 a year. The key to this growth was the solution of a particularly complex packaging problem which, once successfully solved, permitted the company to lop 75% off its shipping costs and made possible a great increase in the area of profitable distribution.

Dannon's problem came to a head just after the close of World War II, when the growing popularity of Dannon yogurt was reflected in demand extending beyond New York City to New Haven, Conn., to Richmond, Va., and to Washington, D. C. Rising transportation costs threatened to nip this growth in the bud. For

every 8 oz. of yogurt the company shipped, it had to pay refrigerated-shipping costs on 8 oz. of glass container plus another 4 oz., more or less, representing the wood insulated shipping container the company used at that time for each dozen jars. As the jars and shipping containers were returned to the company by retailers after use, it became apparent that rising shipping rates could easily eliminate all chances of profit on sales more than a few miles outside of the company's original New York City market.

A light-weight, single-trip container was obviously needed, but when Dannon's executive vice president, J. E. Metzger, Sr., tested the standard containers available, he discovered that a peculiarity of yogurt's production technique rendered these standard containers useless for the product. Yogurt is made from cows'

milk, purified and pasteurized, with the yogurt culture of beneficial bacteria added while the milk is still warm from the pasteurizing. Once cultured, the milk is automatically filled into individual containers which are automatically capped and then placed in incubation chambers at controlled temperatures. Here the milk, with the help of the culture, ferments into yogurt and acquires its characteristic custard-like consistency. When it reaches the right stage of fermentation, the finished yogurt is transferred to refrigerated storage.

The standard paraffin-finish, round, nesting paper containers which Dannon considered the ideal package for the product from a cost standpoint could not take the combination of being filled warm, stored under incubation and transferred to refrigerated temperatures. However, rather than experiment with perhaps costly at-

tempts to develop a light, single-use container which would stand up under these conditions, Dannon decided to turn its research toward modifying the yogurt production technique.

Two years of intensive research finally rewarded the company with perfection of a yogurt culture which produces the same product, but permits the fermentation to take place in milk at a lower temperature which the paper container could withstand.

The successful conclusion of this research two years ago meant that Dannon finally could produce and ship yogurt in paper containers at greatly reduced cost; as a result the company saw its way clear to plan the world's largest and most modern plant devoted to this single product. This plant, which began production this year in Long Island City, supplies Dannon yogurt to an area which now extends from Maine to Virginia and westward through Pennsylvania. Approximately 60% of the plant's output is currently going into the paper containers, which are used for deliveries to many nearby New York City outlets as well as for all shipments to more distant points.

In the plant, production can be switched from glass to paper containers, or the reverse, in a matter of minutes on any of the three vacuum filler-capper units. Fortunately, the

type of machine Dannon had originally chosen to fill and cap the glass, wide-mouth, sour-cream-style pint bottles, could be adapted to fill the paper containers through the use of a comparatively simple set of change parts. These include, for each filler-capper, a set of the rubber valve bells which provide the airtight seal around the finish of the containers during vacuum filling, plus a star wheel and other bottle-handling units for the positioning mechanism. These special change parts, worked out and supplied by the manufacturer of the filler-capper units, are easy to install and readily adjusted. The machines themselves are designed for easy adjustment to container height. Very little production time is lost by use of the two types of container on this equipment.

The caps, of printed paperboard waxed on both sides, are supplied in two sizes; those for the glass bottles have a slightly wider lip to accommodate the greater thickness of the bottle lip.

With the standard round nesting paper containers, Dannon has found it possible to use a kraft board shipping tray for one dozen 8-oz. containers of yogurt; this tray has a die-cut top which holds the containers snugly and permits stacking of full containers. This single-use tray resulted in

further reducing the shipping expense of the product.

Elimination of the need for handling container returns and of repaying deposits to customers has made retailers much more interested in carrying Dannon yogurt, the company reports, and in Dannon's own plant the savings from elimination of the handling, counting and cleaning operation on returned containers have been considerable. Removing the need for container deposits and returns by consumers is believed to have helped sales by removing a barrier to the buying impulse and Dannon has given an extra boost to that impulse by printing its containers in colors to indicate whether the yogurt is plain, or flavored with orange, or has a layer of strawberry preserves at the bottom of the container. Fruit-flavored yogurt today totals about 12% of Dannon's output; the fruit is added automatically in the filling line before the point at which the cultured milk is filled into the container.

CREDITS: Containers, The Lily-Tulip Cup Corp., 122 E. 42nd St., New York 17. Caps, American Seal-Kap Corp., 11-05 44th Dr., Long Island City, N. Y. Shipping trays, Express Container Co., 105 Ave. L, Newark, N. J. "Cemac" filler-capper machines, Crown Cork & Seal Co., Eastern Ave. & Kresson St., Baltimore 24, Md.



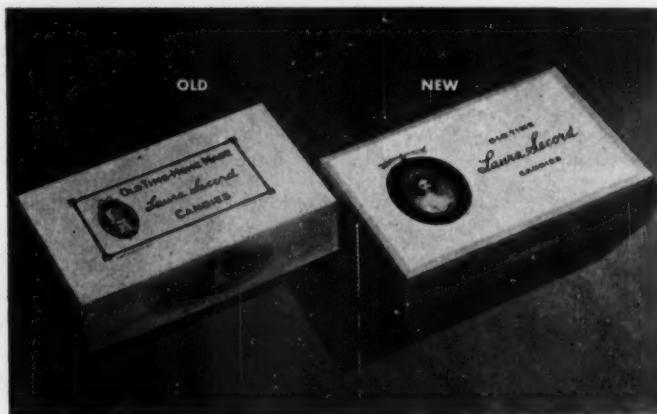
CHANGE PARTS for this automatic filler and capper make it possible to handle either paper cups or glass jars, still used for local trade.

DISPOSABLE TRAYS made of die-cut kraft board are used to deliver yogurt in paper cups, but the regular wire dairy rack is still used for the glass jars.



A new Laura Secord

CANADIAN CANDY FIRM'S FIRST PACKAGE-DESIGN CHANGE IN 39 YEARS
IS A FINE EXAMPLE OF MODERNIZATION WITHOUT LOSS OF IDENTITY



NEW GENERATION requires new package treatment. The stern portrait of Laura Secord gives way to a more charming one that suggests the sweet-ness inside the candy package, yet without sacrificing former recognition.

For the past 39 years the Canadian candy firm, Laura Secord Candy Shops, Ltd., has stood by its familiar black and white candy boxes with the gold embossing and the old-fashioned portrait of the famed Canadian heroine. (This company and the Fanny Farmer Stores in the U. S. have a common president, but are administered as completely separate entities.)

In use since the organization of the company in 1913, this package design has acquired an extremely high identification value. Two generations of Canadian "sweet tooth" have developed the habit of regularly dropping into one of the equally familiar black and white Laura Secord stores for a "box of Lauras."

The company's policy of extending its package decorative motif to its retail outlets has been proved a wise one. Not only has this made Laura Secord stores easy to find, but it has created a useful tie-up in the consumer's mind between the store and the product.

As a result, the company which op-

erates plants in Toronto and Montreal and stores from Quebec to Edmonton, Alberta, has long enjoyed a healthy sales volume in spite of the high sales tax on candy currently in effect in Canada. Yet, today, following a year of intensive research, planning and experimentation, an interesting change has been made in both package design and color.

"Our customers have changed with the years," says R. McGillis, Laura Secord vice president. "The new generation now growing up naturally does not have the same attitude as that which has been buying Laura Secord candy for a good many years. The trend today is ever to something new and different, and we can't afford not to keep up with the times."

The change which has taken place in the standard Laura Secord 1-, 2-, 3- and 5-lb. boxes has several aspects. The heavy black and white illustrations on the sides of the package have disappeared, to be replaced by a pleasing, soft, gray-blue tone which laps over the edge of the box

about a quarter of an inch onto the box face. The old gold-embossed lettering and border of the former package likewise have been displaced by modern black lettering.

Perhaps the most surprising change of all is the disappearance of the company's trademark, the familiar, if somewhat formidable portrait of Laura Secord. The picture of the Niagara frontier woman, who drove a cow through the American lines to bring vital information to the British during the war of 1812, has been replaced by a medallion-type portrait in soft colors of a charming young girl in period dress, looking as Laura may well have looked in her youth.

"The resolute chin and stern appearance of the original portrait is certainly authentic," says Mr. McGillis, "but they hardly suggest the sweet-ness inside the package."

The standard boxes have also been made wider and slightly shallower than their predecessors. In the 1-lb. box the former two layers have become a single layer. The net result in each case is a more gift-like package that lends itself more effectively to display. A pleasing effect of quality and desirability has been achieved without sacrificing former recognition.

Still another innovation is the use of cellophane wrapping on all Laura Secord packages. Even filled-to-order boxes are cellophane wrapped in the stores at the time of purchase.

To date two stores, both located in Toronto, have been converted to the blue-gray and white motif used on the new boxes. At the moment, the company reports, this activity is purely experimental. It is desired to arouse public curiosity, of course, but there is no intention at present to abandon the black and white in the stores. Canadians know it too well.

CREDITS: Design, Clare Stewart, Toronto, Ont. Boxes, Automatic Paper Box Co., Ltd., Toronto. Labels, Ralph, Clark, Stone, Ltd., Toronto. Cellophane, Canadian Industries, Ltd., Toronto.

FOR A YOUNGER, "UPLIFTED" LOOK

Helena Rubinstein's New Contour-Lift Film



A Prestige Product
Packaged by BURT

F. N. Burt Company, Inc. - Manufacturers of Small Set-up Boxes, Folding Cartons and Transparent Containers - 500-540 Seneca Street, Buffalo 4, New York - Offices in Principal Cities Or Write Direct - Canadian Division: Dominion Paper Box Co. Ltd., 469-483 King St. W., Toronto, Canada

IDEAS DEVELOPED HERE

may help your SALES
... cut your COSTS

You can't ignore the fact that today's competition calls for the utmost selling power in your package. Yet close profit margins compel you to make every possible economy in packaging costs.

Here at PACKAGE you'll find the experience and modern know-how that may help you achieve both of these objectives.

Working closely with leading package goods manufacturers, our engineers are constantly coming up with ideas that lead to new and bet-

ter types of packaging—as well as more efficient, cost-cutting machines. The result is that today our machines wrap *more different products* and a *greater volume* of goods than any other make of machines.

Why not put this unparalleled experience to work for your company? We'll be glad to study your package and production methods with you and give you the benefit of our recommendations. *Write or phone our nearest office*

PACKAGE MACHINERY COMPANY • Springfield, Massachusetts

NEW YORK CHICAGO BOSTON CLEVELAND ATLANTA DALLAS DENVER
LOS ANGELES SAN FRANCISCO SEATTLE VANCOUVER, WASH. TORONTO MEXICO, D.F.



PACKAGE MACHINERY COMPANY

TECHNICAL

ENGINEERING • METHODS • TESTING

Charles A. Southwick Jr. • Technical Editor

Evaluation of heat-seal adhesives

LABORATORY PROCEDURES FOR APPLYING TEST COATINGS AND AN APPARATUS

FOR THE DETERMINATION OF SEALING RANGE ARE DESCRIBED.

By Harold Wittcoff and Dwight Peerman*

In the past decade, coatings which include among their functional properties the ability to provide bonds under the influence of heat and pressure have become firmly entrenched in the packaging field.

These adhesives, based largely on thermoplastic resins¹, may be formulated in numerous ways. Ideally, they are solid and non-tacky at temperatures and pressures encountered under ordinary conditions of manufacture, transportation and storage. When subjected to a certain threshold temperature, usually within the limits of 150-300 deg. F., they become either tacky and pressure sensitive or completely fluid. Some adhesive coatings lose this pressure-sensitive condition once the source of heat is removed. These are termed *instant-tack adhesives* and bond formation must be effected by the simultaneous application of heat and pressure for a given length of time. Other adhesive coatings retain their tack, after heat activation, for a period of time varying from a few sec-

onds to several days. These are termed *delayed-tack adhesives*; and with these, bond formation may take place by the application of pressure at some period subsequent to the application of heat.

The advantages of heat-seal adhesives for labeling, bag sealing and similar operations are well known. Primarily, production speed is increased several fold. In addition, neater jobs are obtained, adhesive waste is minimized, less hand labor is required, cleaning of equipment is rarely necessary and the number of rejects is reduced. The adhesives involved are ordinarily tough and flexible. They may have good electrical properties and may demonstrate resistance to moisture, solvents and chemicals.

Since this paper is concerned primarily with evaluation, a detailed discussion of chemical composition of heat-seal adhesives is not within its scope. It should be pointed out, however, that several types of resins are available which, with more or less compounding, may be formulated into heat-seal adhesives. Among the widely used compositions are those based on nitrocellulose, cellulose acetate, ethyl cellulose, polyvinyl chlo-

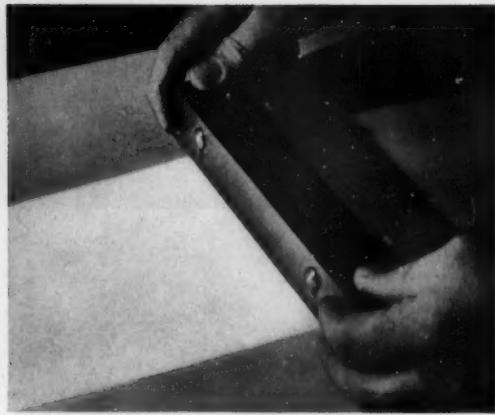
ride-polyvinyl acetate copolymers, polyvinyl acetals, polyamide resins, rubber derivatives and asphalts. Some materials, like the polyamide resins, may be used as hot melts, lacquers (solvent solutions) or water dispersions. Other compositions, such as those based on nitrocellulose, can be used only from solvent. For the vinyls, which have limited solubility even in strong solvents, new forms have been devised known as plastics and organosols.

Since numerous heat-seal formulations based on numerous resins are available, the user frequently finds it difficult to determine which material will accomplish the end he desires. Some applications require more rigid standards than others. Whether a heat-seal adhesive will function properly in a given use can be determined only after adequate evaluation.

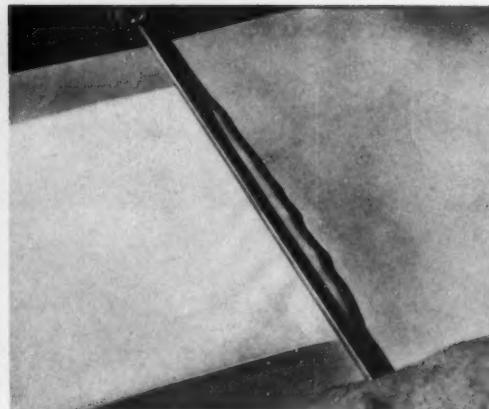
This paper, then, will outline a procedure for the laboratory evaluation of a heat-seal coating. The physical forms of the adhesives themselves and their methods of application will be discussed briefly. Thereafter, film properties including appearance, offset properties, blocking, heat-seal temperature, heat-seal

* Of the Research Laboratories, General Mills, Inc., Minneapolis, Minn. Paper No. 138, Journal Series, Research Laboratories, General Mills, Inc.

¹ The evaluation procedure described here is intended primarily for resin-based adhesive coatings rather than for wax coatings.



1. BIRD APPLICATOR laying down a heat-seal adhesive film for laboratory testing. In using hand coating devices, it is desirable to elevate top end of glass plate.



2. WIRE-WRAPPED ROD may also be used for the application of test heat-seal film. Greater versatility in ream-weight control is possible with wire-wrapped rods.

range, ability to seal to various surfaces, and aging characteristics of the bond must be determined. Once laboratory evaluation has pointed the way, limited field-test service is always advisable in order to corroborate laboratory results and in order to unearth any possible unexpected requirements.

Adhesives and coating methods

Heat-seal adhesives are available in various physical forms which dictate the procedure to be used for application. A detailed description of commercial coating procedures is beyond the scope of this paper. An excellent discussion of these will be found in a monograph entitled "Machinery for Paper Coating."² For labels, roller coating is frequently employed, since the entire surface must be coated. Where spot adhesion is required, as in the fabrication of bags, pouches or cartons, application of the adhesive in solvent solution or as a water dispersion by a rotogravure press is widely used. Here only general comments will be offered in regard to coating processes and the physical form of the adhesive each requires.

Hot-melt adhesives. If the adhesive is a solid which melts in the region of 100 deg. C. or lower, and if in the melt form it does not tend to decompose, it may be applied as a melt. Such adhesives are designated

as hot melts because of their method of application. Although their application requires rather specialized equipment and is prone to be untidy, the use of hot-melt adhesives eliminates the cost of solvent or the need to remove water. It is important to stress the point, however, that the adhesive must be such that its viscosity in the melt form is sufficiently low for ready application.

Such adhesives, furthermore, must not "body" or gain viscosity excessively on continued heating. The operator, on the other hand, must be sure that he does not maintain the melt pot at a temperature higher than absolutely necessary, that he employs agitation if required and that he avoids repeated solidification and remelting. The size of the pot should be commensurate with the job and only enough adhesive should be kept molten to allow for efficient operation.

Blanketing of the melt pot with an inert gas is frequently advisable, although not always technically possible.

Lacquer adhesives. If the adhesive is used as a solvent solution, it is termed a lacquer or a varnish. Application is relatively simple. If barrier properties in addition to heat sealability are desired, "pinholing" must be avoided by proper choice of solvents and coating techniques. Solids content and choice of solvents are factors determined largely by the nature of the adhesive and by viscosity requirements. Most resinous adhe-

sives are not soluble in cheap solvents such as hydrocarbons. Ideally, however, it should be possible to use relatively large quantities of these cheap solvents as diluents, without destroying solvency or altering viscosity beyond a usable range.

Impregnation of the adhesive into the paper during coating or drying is to be avoided, since this makes available for sealing only a portion of the adhesive applied. In roller coating, impregnation may be eliminated by the use of warm solutions containing high-solids contents.

Adequate equipment for the removal of the solvent is, of course, mandatory. Solvent-recovery systems have proved profitable for large operations.

Water-dispersed adhesives, which are termed emulsions, or, more properly, suspensoids, have attracted great interest recently. Their application is relatively simple and the disadvantages of solvents—toxicity, explosion hazards and cost—are avoided. Adequate drying equipment for removal of water is necessary.

It is important that the system used for stabilizing the water dispersion be such that the inherently good properties of the base resin are not vitiated. Of particular importance is the effect of the dispersing system on blocking resistance, sealing temperature and water-vapor transmission.

Water dispersions frequently provide discontinuous films. This, however, is not a deterrent if the coating is desired primarily for heat sealabil-

² TAPPI Monograph Series No. 8, "Machinery for Paper Coating," Technical Assn. of the Pulp and Paper Industry, New York, 1950.

ity and not for barrier properties. If, on the other hand, barrier properties are required, the film must be fused by the application of heat or by the inclusion in the formulation of appropriate quantities of solvent or plasticizer.

Organosols and plastisols. Organosols are dispersions of resins in organic solvents in which they are not soluble. Much of the discussion under lacquers applies here. Plastisols are dispersions of resins in plasticizers. Once the material has been coated, it is necessary to apply heat in order to incorporate the plasticizer into the resin to obtain the final composition. Ordinarily, high temperatures are required and care must be taken not to embrittle the base stock.

Laboratory application of films

The above discussion is a general consideration of the relationship of the physical form of the adhesive to the method used to apply it. It is important from the point of view of laboratory evaluation to be able to apply films properly, since this is the first step in heat-seal adhesive evaluation.

First of all, a base stock must be chosen. The choice of this supporting surface depends, to a large extent, on the use involved. In general, papers with sufficiently dense surfaces to prevent excessive penetration should be chosen. If the end application is labeling, tests are conveniently run on base stock comprising 50- or 60-lb. (25 x 38-500) litho, coated one side. Where structural strength is important, heavier papers or board stock may be used. Cellulosic or other plastic films, foils and metals may also be used, if these are involved in the final application. *It is of utmost importance, however, when describing test results to include a description of the base stock employed.*

Having decided on the base stock, it is then necessary to apply an even, uniform coating. Bird applicators and wire-wrapped rods (R & D Specialty Co.) are frequently used (Figs. 1 and 2) for lacquers and water dispersions. Ream weight of the coatings can be varied, using Bird applicators, by the use of a series of applicators intended to give different coating thicknesses and by varying the solids content and viscosity of the adhesive. More versatility in ream-weight control is possible with wire-wrapped rods, since these are available with

many different gauges of wire. The hand pressure applied is also an important factor in ream weight control when using wire-wrapped rods and thus the skill of the operator is an important factor. Ream-weight control with this coating device is also a function of viscosity and solids content.

In using hand coating devices it is desirable, as shown in Figs. 1 and 2, to place the paper on a smooth glass plate and to elevate the top end of the plate.

A particularly effective device for laboratory coating consists of two smoothly machined stainless steel rods properly supported on a rack. The distance between the rods can be regulated by the insertion between them of shims of varying sizes. For coating, as indicated in Fig. 3, paper is inserted between the bars and is pulled through by one operator while a second operator pours evenly the water dispersion or lacquer to be coated between the bar and the surface of the paper. By this procedure, relatively long continuous lengths of paper can be coated.

Various automatic or semi-automatic coating devices are available, exemplary of which is the Martinson coater which coats 9-by-12-in. sheets of paper with either solvent solutions or water dispersions. More complex laboratory coaters which are replicas of plant equipment can be purchased or built. In general, however, these are not required for most heat-seal evaluations.

The above discussion is concerned largely with the laboratory coating of solvent solutions or water dispersions. Hot-melt coating in the laboratory is more difficult. Usually this is avoided by carrying out the evaluation on solvent-cast films of the adhesive which, in actual practice, is to be applied by hot-melt methods. This is possible since hot-melt and solvent coatings, from the point of view of adhesion, provide practically equivalent films.

If it is absolutely necessary to coat from hot melt, it should be possible to heat electrically the stainless steel bars shown in Fig. 3 and molten adhesive could be used rather than a lacquer or water dispersion. Laboratory replicas or full-scale, hot-melt coating equipment can also be built, if it is necessary to determine the hot-melt characteristics of the adhesive.

Laboratory gravure presses are available and can be used to advan-

tage if the full-scale coating is to be done by this process.

After solvent solutions or water dispersions have been coated, it is necessary to remove volatile material. This can be done by air drying, although drying in an oven at temperatures up to 80 deg. C. is more convenient. Usually, only a few minutes are required.

Ream-weight determination. After the coating is completely dry, the ream weight of the applied coating must be determined. This comprises comparing the weight of 4-by-4-in. squares of coated and uncoated paper, using a Thwing-Albert balance, as specified in TAPPI Standard T410M. A template of suitable size is desirable for obtaining accurate samples readily. Since base stock varies in weight, the exact ream weight of the coating can be determined only by weighing an uncoated sheet, coating it and reweighing the same sheet.

An ordinary torsion balance, accurate to 0.01 gram, can also be used for ream-weight determination. It is convenient to place an uncoated 4-by-4-in. square of stock on the right-hand pan and a similar coated square on the left-hand pan. The difference in weight can be translated into pounds per ream.

Since different base ream weights are employed throughout the industry, it is important to specify dimensions when referring to ream weight. A more logical designation is pounds of coating per 1,000 sq. ft.

Film and bond evaluation

Once the adhesive has been applied to a surface and its coating weight determined, the most important part of the evaluation starts. It is of primary importance to determine film properties, blocking characteristics, heat-sealing temperature and range, the surfaces to which the adhesive seals and the low-temperature as well as the aging characteristics of the bond.

Appearance. The heat-seal coating must be uniform and free of foreign particles. Color is not usually important. For some machine operations the discontinuous surface obtainable from some water dispersions is desirable.

Fig. 4 demonstrates, by the use of magnification, the difference between a film of polyamide resin coated from solvent and a film of the



3. CONTINUOUS COATING of the paper by passing between two carefully machined 1-in. stainless steel rods. The bars are movable to regulate the coating weight and they may be electrically heated for hot-melt coating.

same material coated from water dispersion.

"Sweating" of the film due to the presence of incompatible liquid plasticizers is undesirable, since this may contribute to blocking or "offset." Sweating can be recognized readily by rubbing the film, 24 to 48 hrs. after it has been cast, with tissue paper and noting whether anything is removed.

Offset. "Offset" is the phenomenon in which a component of a film—ordinarily one with low compatibility—transfers from the coated surface to the uncoated surface in contact with it. This transfer is facilitated by the pressure exerted in rolls or stacks of paper. Offset may make printing of the uncoated surface difficult and should be avoided. It can usually be detected by drawing an inked pen with a fine point lightly over a suspected surface. A discontinuous ink line indicates offset. In the laboratory, offset may be detected by placing a coated surface next to an uncoated surface between the jaws of a Carver or similar press. A pressure of about 2,000 p.s.i. is exerted for three to five minutes. If offset is detected by the above ink-line test applied to the uncoated surface, al-

teration of the heat-seal formulation is indicated.

Blocking tests. In the measurement of blocking characteristics, five variables must be considered: coating weight, temperature, relative humidity, pressure and time. The standard procedure for carrying out blocking tests may be found in TAPPI Standards T-477-m-47.⁸ The test comprises subjecting two pieces of coated paper, either coated side to coated side (face to face) or coated side to uncoated side (face to back) to a given pressure for a given time, under specified conditions of temperature and humidity. Interleaving sheets must be present between each pair of papers and the stack under test can contain only four pairs of sheets.

The tests should be carried out using paper coated at a ream weight dictated by the final application. This means simply that there should be sufficient coating to provide a bond of required strength. Frequently it is necessary to make only face-to-back determinations, since face-to-face conditions are rarely encountered in actual practice. The temperature and relative humidity are chosen on the basis of conditions expected during shipping and storage. Thus, blocking tests are frequently carried out at 60 deg. C. and 90-100% relative humidity. Humidity is achieved by placing the samples in a desiccator containing the proper salt solution. For 43% relative humidity at 25 deg. C., a saturated solution of $K_2CO_3 \cdot 2H_2O$ may be used. For 90-100% relative humidity, water is placed in the bottom of the desiccator. In order to prevent actual wetting of the paper, slight venting may be necessary. It is important for accurate results, however, that water be present in the desiccator throughout the entire test.

Temperature is achieved by placing the desiccator in an oven.

Pressure is the most difficult variable to define, since the pressure actually developed inside a huge roll of paper or under other conditions of actual operation cannot be readily determined. In actual tests, pressures of 1 to 2 lbs. are used, although in special situations pressures as high as 10 lbs. may be used. For obtaining the proper pressure, a bottle filled with lead shot is convenient. The quantity of shot depends on the surface area of the bottom of the bottle

and the weight per square inch desired.

Blocking tests are usually carried out for a period of 24 hrs. Longer times may be used if there is reason to expect "flow" of the adhesive under continued pressure.

The exact procedure for carrying out the test and the interpretation of results are discussed in the above-mentioned TAPPI standard and require no further elaboration here.

It is of importance to note that at least two simple tests of a practical nature are available which provide information on the blocking characteristics of coatings. A sheaf of coated papers may be clamped tightly in the jaws of a C-clamp for about 24 hrs. Examination of the coated sheets after release of the pressure gives some idea of what may be expected in practice. Also, cutting a stack of papers with a sharp paper cutter gives an indication of any "edge blocking" which might be expected.

Heat-sealing temperature and range. An ideal heat-seal adhesive will form a bond at a temperature very slightly higher than the temperature at which it will not block. Preferably, this temperature is in the region of 80 deg. C. The lowest temperature at which heat sealing takes place usually corresponds with the temperature at which the adhesive film softens or starts to flow. This can be determined by placing a piece of coated base stock on a block, heated electrically to a given temperature. The temperature is increased gradually until softening is observed.

For many applications it is important that a fibre-tearing bond result precisely at the time that the heat is applied and not several seconds later after the bond has cooled. Instant bond formation of this type prevents a label from slipping out of its initial position. More important, it makes possible the application of stress to the bond immediately after its formation. This is extremely significant in applications such as bag sealing, where the contents of the bag cause tension to be exerted on the heat seal as soon as it is made.

The temperature span over which a bond will form under a given pressure and will withstand immediate stress is defined as *heat-seal range*. It must be distinguished from *heat seal temperature*, which is the lowest temperature at which a bond will

⁸ Technical Assn. of the Pulp and Paper Industry, 122 E. 42nd St., New York 17.

form. The determination of this heat-seal range, which also, incidentally, determines the lowest temperature (heat-seal temperature) at which bond formation will take place, can be effectively carried out by use of the apparatus shown in Fig. 5. This apparatus is readily built and consists of two copper sealing jaws (A), the center portions of which are raised so that an effective sealing surface of one linear inch is present. Since metal surfaces tend to warp under the influence of heat, the copper blocks should be examined carefully at frequent intervals and should be remachined when necessary. These jaws are heated electrically by Cal-rod heaters and their temperature is controlled by use of a "Variac" (B). They are bored for the insertion of two metal thermometers (C) and the sealing temperature is the average of the values recorded on the two thermometers. It is convenient to determine the relationship of "Variac" settings to actual temperature. The lower jaw is stationary, whereas the upper one is mounted on the end of a lever, so that it may be subjected to the action of a set of adjustable weights (D). These weights rest on a platform and exert a force on the upper jaw when the platform is removed by means of a foot pedal (E). The relationship of the weights to the force applied to the upper jaw—i.e., to the sealing pressure—must be determined by actual measurement with a spring scale. Ordinarily the pressure is held constant at about 9 p.s.i. and is varied only when necessary to obtain data applicable to anticipated use conditions. The pressure used, however, must always be noted in reporting results.

For the determination of sealing range, a 1-by-8-in. strip (F) of paper base stock, coated at the appropriate ream weight, is folded in half and the folded portion is inserted into the jaws for seal formation. Prior to the actual formation of the seal, however, the upper edge of the strip is fastened to the frame above the upper jaw and is held stationary. To the lower edge of the strip, a standard weight (G) is attached with the aid of an appropriate clip. The folded portion is then inserted between the jaws, which are clamped together automatically when the operator releases the weights by stepping on the platform. The jaws are held together for five seconds. This dwell time is

considered necessary in order to establish temperature equilibrium, although it far exceeds dwell times encountered in actual machine operation. Thereafter, the jaws are released; the paper slips out from between the jaws and an immediate tension is exerted by the weight on the newly formed bond. If the bond holds, the adhesive is said to give an immediate seal at the average temperature recorded by the thermometers. The temperature is then raised or lowered and the process repeated until the limits are established at which bond formation will not take place under tension.

As indicated above, the tension is obtained by attaching a weight to the lower edge of the strip forming the bond. The amount of weight attached is determined by the rigidity of the requirements of the proposed end use. Ordinarily 10 to 30 grams per linear inch is satisfactory. Obviously, by increasing the weights, the maximum tension applicable to a bond at a given temperature of formation can be determined and such information is frequently of great importance.

By this method of heat-seal-range determination, using a pressure of 9.5 p.s.i. and a tension of 12 grams per linear inch, some commercial polyamide resin suspensoid compositions were found to have the heat-seal ranges shown in Table I.

Tensile tests. After bond formation, it may be desirable to determine the tensile strength of the bond. This can be done by use of the Thwing-Albert, Scott or other tensile testers. ASTM

TABLE I

Composition	Heat-seal range (°C.)
Polyamide resin suspensoid A-000	80-100
Polyamide resin suspensoid A-001X	70-100
Polyamide resin suspensoid B-200	60-120
Polyamide resin suspensoid B 1001X	70-150
Polyamide resin suspensoid E-200	90-170 plus

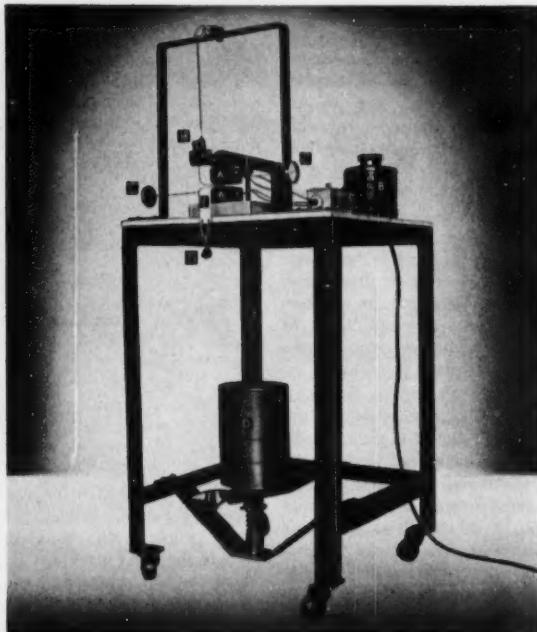
Method D 903-49 describes a tensile test for adhesives.

It is important to realize, however, that if a fibre-tearing bond between paper is involved, one is testing only the strength of the paper and not the strength of the adhesive. Tensile tests, then, are of value only where bonds have been prepared between base stocks such as plastic films where the bond gives way before the base stock is ruptured.

Bond stability. Of utmost importance in laboratory evaluation is the testing of bond stability. Again the severity of the tests depends on the demands of the anticipated end use. In any case it is necessary, first of all, to prepare the bonds and here the experience of the operator becomes an important factor. Although bonds may be prepared by use of the heated jaws of the apparatus shown in Fig. 5, the experienced operator ordinarily uses an electrically heated hand sealing iron. Several types are available from a number of suppliers. The point must be stressed that it is absolutely necessary to determine

4. MAGNIFIED VIEW of two coated samples illustrates the difference between films of a polyamide resin coated from solvent (left) and from water dispersion (right).





5. APPARATUS for determining the heat-seal range of adhesives: *A*, copper sealing jaws; *B*, Variae temperature control; *C*, thermometers; *D*, adjustable weights; *E*, foot pedal; *F*, strip of heat-seal paper with the folded portion inserted between the sealing jaws; *G*, standard weight clipped to the lower end of the sample; *H*, stationary clip holding the upper end of the sample strip.

the temperature of the iron by use of a surface pyrometer such as a Pyrocon. Furthermore, this determination must be made at frequent intervals, since the temperature of the iron decreases in relation to constant current input with use and age.

The bonds to be tested are made between the surfaces with which the adhesive will be used in practice. Also, end use will determine whether one or both surfaces will be coated. Bag formation usually requires bond formation between two coated surfaces, whereas in label work only one side (the label) is coated.

It is difficult to describe the precise procedure for the formation of a bond with a hand sealing iron. After considerable practice, the operator will discover the subjective factors which require control in order to obtain consistent results. The areas to be bonded should be placed on a pad of paper in order to obtain a cushioned surface. The iron, heated to the proper temperature, is applied for a period of approximately one

second. Longer dwell times are of no value since they are not encountered in actual practice. Some operators first seal one corner so that there will be no slippage during bond formation. The pressure applied depends entirely upon the operator, who should attempt to make it as consistent as possible. Fortunately, pressure is not ordinarily very critical once a certain threshold has been exceeded.

Seals are usually made with an iron heated to 200, 250 or 300 deg. F. The need for determining this temperature accurately has already been stressed. The actual temperature used depends on the activation temperature required by the adhesive. Obviously, in the short dwell time used, the adhesive does not reach the temperature of the iron. This, however, is practically always the case in mechanical sealing.

In testing a new heat-seal adhesive formulation, it is necessary to determine the ability of the adhesive to form bonds between numerous surfaces and combinations of these. Sur-

faces which may be tested include label paper, kraft paper, glassine paper, glass, wood, cloth, tin, various metal foils, coated (MST) cellophane, uncoated (PT) cellophane, cellulose acetate, Pliofilm, saran, vinyl film, polyethylene and Mylar.

Once the bonds have been made and have come to equilibrium at room temperature, they are examined for per cent bond formation. An attempt is made to separate the two surfaces by the manual application of a shearing stress. Bonds involving paper must tear fibre to be acceptable for practically all uses. The resistance presented by bonded surfaces such as foil and plastic films can be evaluated comparatively, once some experience has been gained. As indicated above, more exact data can be obtained by actual measurement of tensile strength.

Aging characteristics and stability at low and high temperatures must next be determined. Although these tests are simple to perform, they are of the utmost importance.

One set of bonds should be stored under laboratory conditions and examined at intervals for percentage bond retention. Storage over a period of six months is ordinarily desirable and at the end of this time at least 50% of the initial bond should be retained.

Other sets of bonds should be refrigerated at 0 deg. F. and at minus 20 deg. F. for at least 24 hrs. They should then be examined *at these temperatures*. Storage at lower temperatures or for longer periods of time may be indicated by end use. Again, 50% bond retention should be expected. This test, which effectively measures brittleness of the bond, is an excellent indication of whether plasticizer balance has been achieved in the formulation.

For results of statistical significance no less than 10 bonds should be examined in each of the above tests.

Summary

This paper has described procedures for the preliminary evaluation of heat-seal adhesives. The preparation of the film for evaluation, the determination of sealing temperature and sealing range, formation of bonds between various surfaces and determination of bond stability are discussed. In addition, an apparatus recently developed for the determination of sealing range is described.

Economical use of fibreboard

STUDY OF MASTER SHIPPING CONTAINERS FOR PRE-PACKAGED TOMATOES

ILLUSTRATES POSSIBILITIES. By Beulah C. Robertson and William A. Aronow*

An estimated 75% of all fall, winter and spring tomatoes are pre-packaged in consumer-sized packages. These consumer packages or trays are placed into master containers for shipment from pre-packaging plants to retail stores. Some of these unit trays are designed to hold three tomatoes and others to hold four or five, the number depending on the size of the tomatoes. These containers are not standardized and do vary, chiefly in length. However, these variations in size of trays are not considered sufficient to destroy the value of the comparisons made of the master containers in this study. Most of the master containers are made of fibreboard, although some pre-packagers use other containers such as tomato lug boxes or wirebound crates.

A study was made of 49 fibreboard

* Agricultural Marketing Specialist and Fruit & Vegetable Marketing Specialist, respectively, Fruit & Vegetable Branch, Production & Marketing Administration, U. S. Department of Agriculture, Washington, D. C.

master containers obtained from manufacturers during the 1950-51 season to determine:

1. The variation in the quantity of fibreboard used in these different containers.

2. The variation in the quantity of fibreboard used, according to size, shape and type of container.

3. Possible economies in the use of fibreboard in master shipping containers for pre-packaged tomatoes.

Although the data obtained in this study do not provide a complete basis for evaluating the containers, they do point up the need for further research to determine possible savings through more economical use of packaging materials.

Quantity used in containers

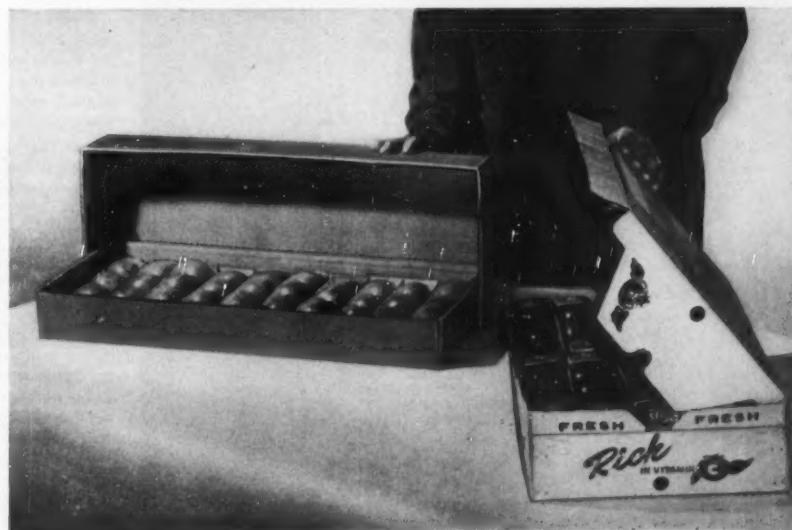
The amount of fibreboard used in each of the 49 master containers, which were designed to hold from 10 to 32 trays of tomatoes, ranged from 498 to 1,402 sq. in. This figure in-

cludes only the actual amount of fibreboard in the flat container and does not include fibreboard trimmings or cut-outs. The quantity of fibreboard used in each master container, per tray of tomatoes that the container was designed to hold, ranged from 33 to 107 sq. in. per tray and averaged 77 sq. in. per tray.

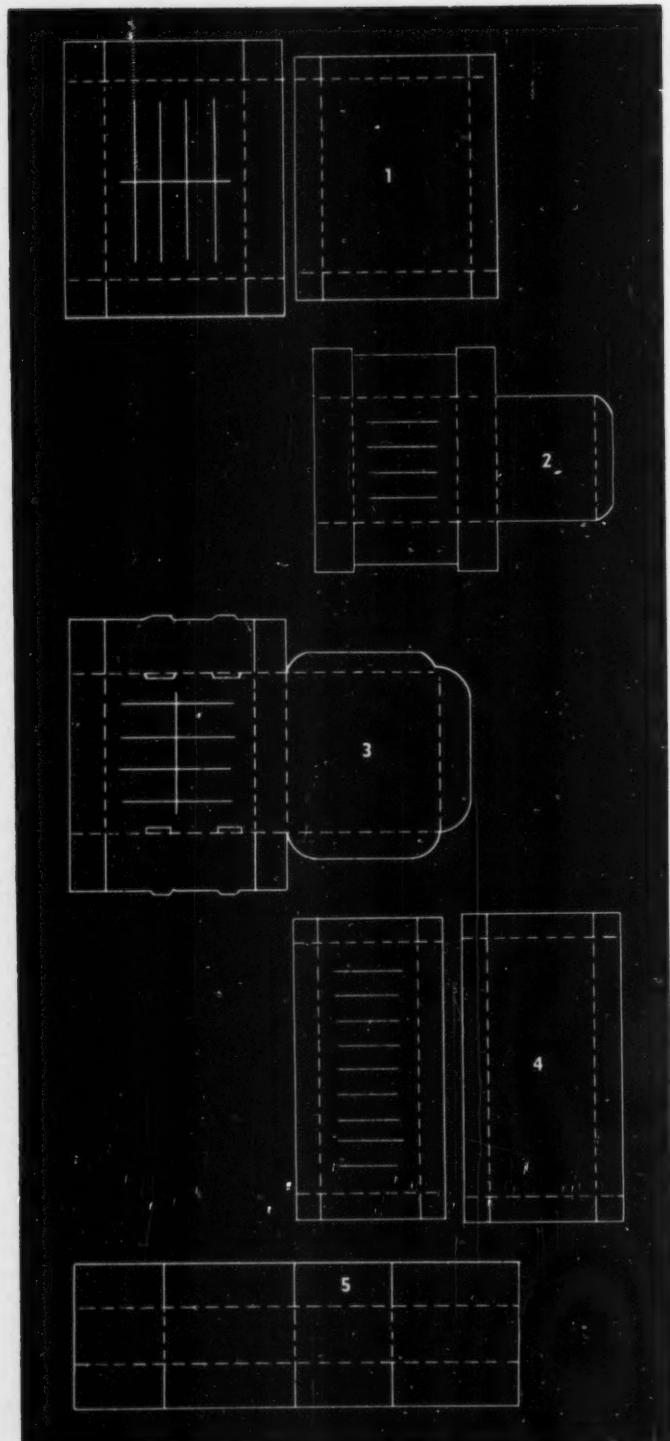
Use by container size, shape, type

Size of container. Most of the 49 master containers studied were designed to hold 10 consumer packages of tomatoes each and the amount of fibreboard used in these containers averaged 83 sq. in. per tray of tomatoes and they were much more economical than the 10-unit containers in use of fibreboard, averaging 55 sq. in. per tray of tomatoes. Only one of the master containers studied was designed to hold 32 trays and it used only 33 sq. in. of fibreboard per tray.

Shape of container. The shape of the container, as indicated by the



1. FIBREBOARD master shipping containers holding 10 and 20 trays of tomatoes—two common units of sale. The 20-unit master containers used on the average 34% less fibreboard per tray of tomatoes than did the 10-unit master containers.



depth or the number of layers of pre-packaged tomatoes it is designed to hold, is also associated with the quantity of fibreboard used. Of the 49 containers studied, 32 were designed to hold only one layer of consumer packages of tomatoes. The one-layer master containers, on the average, used more fibreboard per tray of tomatoes than 16 containers designed to hold two layers—these groups averaging 88 and 57 sq. in. respectively (see Table II).

Among the 37 ten-unit master containers, six two-layer containers used, on an average, nearly one-third less fibreboard than was used by 31 one-layer 10-unit containers, the two groups averaging 60 and 88 sq. in. per tray, respectively (see Table III).

One container held four layers of trays—the 32-unit box—which as previously stated used only 33 sq. in. per tray. Obviously, deeper and more cube-shaped master containers require less material per given capacity. However, in determining the number of layers of trays to be packed into a master container, other factors have to be taken into consideration, such as the distance the pre-packaged tomatoes are shipped, which might affect the amount of bruising of the tomatoes.

Type of container. Five types of master containers were represented among the 49 studied: a two-piece full telescope, a two-piece half telescope, a one-piece self-locking, a one-piece stitched and a one-piece regular slotted box (see Fig. 2).

Among the 10-unit containers, one-piece regular slotted boxes and one-piece stitched boxes used the least fibreboard per tray of tomatoes, each of these types averaging 65 sq. in. per tray (see Table I). The one-piece self-locking and the two-piece full-telescope boxes averaged 87 and 90 sq. in. per tray of tomatoes, respectively.

In the 20-unit size, the types of containers ranked substantially in the same order as the 10-unit containers in use of fibreboard. One-piece

2. FIVE TYPES of knocked-down fibreboard master containers for tomatoes: (1) two-piece half telescope box; (2) one-piece stitched box; (3) one-piece self-locking box; (4) two-piece full telescope box and (5) the one-piece regular slotted container.

TABLE I—AVERAGE TOTAL QUANTITY OF FIBREBOARD IN 49 MASTER CONTAINERS FOR PRE-PACKAGED TOMATOES AND AVERAGE QUANTITY IN FLAPS ONLY, PER TRAY OF TOMATOES, ACCORDING TO SIZES AND TYPES OF CONTAINERS

Size and type of container	Containers measured (No.)	Total quantity of fibreboard per tray		Fibreboard used only for flaps—per tray	
		Range (sq. in.)	Average (sq. in.)	Range (sq. in.)	Average (sq. in.)
10-unit containers					
One-piece regular slotted box	2	64 to 65	65	19	19
One-piece stitched box	6	50 to 80	65	4 to 25	13
One-piece self-locking box	12	71 to 90	87	12 to 25	20
Two-piece full-telescope box	17	77 to 107	90	21 to 37	27
Total or average	37	50 to 107	83	4 to 37	22
12-unit containers					
Two-piece full-telescope box	1	82	82	22	22
20-unit containers					
One-piece stitched box	4	43 to 50	47	3 to 10	7
One-piece regular slotted box	1	50	50	10	10
Two-piece half-telescope box	1	54	54	15	15
Two-piece full-telescope box	4	60 to 70	55	23 to 27	27
Total or average	10	43 to 70	55	3 to 27	16
32-unit containers					
One-piece regular slotted box	1	33	33	4	4
Total or average	49	33 to 107	77	3 to 37	20

stitched boxes used an average of 47 sq. in. of fibreboard per tray of tomatoes as compared with 50 and 54 sq. in., respectively, for the regular slotted and the two-piece half-telescope boxes. The two-piece full-telescope type, which averaged 66 sq. in. of fibreboard per tray, was the least economical of this size in use of fibreboard. However, the two-piece

full-telescope container accounted for nearly half of the 49 containers examined, which indicates that this type of container may be generally preferred by the tomato pre-packaging industry because of other characteristics of the container, such as strength, ease of opening and closing, or reuse.

The same ranking of container

types was found when the containers were evaluated in terms of square inches of fibreboard used in the flaps. This indicates that these differences in the use of fibreboard among the five container types are largely due to differences in design which affect the quantity of fibreboard used for flaps.

Other factors. Other factors likely to influence the choice of a master container for pre-packaged tomatoes and the amount of fibreboard used are: container costs, trade acceptance, strength of the container, ease of opening and closing, length of haul, ease of storing and assembling, and the amount of headroom considered necessary in the filled container.

Possible economies in use

Of the 49 master containers for tomatoes included in this study, 37 were 10-unit boxes. These boxes used an average of 83 sq. in. of fibreboard per tray. Six of the 10-unit boxes were double layered. These used nearly one-third less fibreboard per tray than the single-layer boxes, averaging 60 sq. in. per tray, as compared with 88 sq. in. for the single-layer boxes.

The most economical of the single-layer containers—a one-piece self-locking box, holding one layer of 10 trays—and the most economical of the double-layer containers—a one-piece stitched box holding two layers of packaged tomatoes, five trays per layer—each used approximately 20% less fibreboard than the average quantity used by their respective groups. The double-layer container, which was also the most economical of all the 10-unit master containers studied, used 50 sq. in. of fibreboard per tray, approximately 40% less than the average of 84 sq. in. of fibreboard per tray used in the other 36 ten-unit containers studied.

Ten of the master containers included in this study were 20-unit containers. These were all double-layer containers and averaged 55 sq. in. of fibreboard per tray. The 20-unit master container found most economical in the use of fibreboard was a one-piece stitched box that contained 43 sq. in. of fibreboard per tray, which was 25% less than the average of 57 sq. in. per tray used in the nine other 20-unit containers studied. The remaining two containers studied had capacities of 32 units and 12 units, and are in less general use than the 10-unit and 20-unit containers.

TABLE II—AVERAGE QUANTITY OF FIBREBOARD PER TRAY OF TOMATOES IN 49 MASTER CONTAINERS FOR PRE-PACKAGED TOMATOES, ACCORDING TO NUMBER OF LAYERS OF TRAYS IN CONTAINERS

Layers of trays	Trays per master container				Containers measured	Total fibreboard content per tray of tomatoes		
	10 unit	12 unit	20 unit	32 unit		No.	Range (Sq. in.)	Average (Sq. in.)
	No.	No.	No.	No.				
1	31	1	..	..	32	71 to 107	88	
2	6	..	10	..	16	43 to 70	57	
4	..	..	..	1	1	33	33	
Total or average	37	1	10	1	49	33 to 107	77	

TABLE III—AVERAGE QUANTITY OF FIBREBOARD PER TRAY OF TOMATOES IN 37 TEN-UNIT MASTER CONTAINERS FOR PRE-PACKAGED TOMATOES ACCORDING TO NUMBER OF LAYERS OF TRAYS IN CONTAINERS

Layers of trays	Containers measured (No.)	Total fibreboard content per tray of tomatoes	
		Range (Sq. in.)	Average (Sq. in.)
1	31	71 to 107	88
2	6	50 to 70	60
Total or average	37	50 to 107	83

Questions & Answers

This consultation service on packaging subjects is at your command. Simply address your questions to Technical Editor, Modern Packaging, 575 Madison Ave., New York 22, N. Y. Your name or other identification will not appear with any published answer.

Overcoming weight loss of films

QUESTION: In connection with some package testing we are doing, we have noticed that plastic films show appreciable weight loss upon heating. This weight loss is different with different materials, but in some cases can be great enough to introduce serious errors in our results. Can you suggest how this loss is occurring and what can be done to minimize or prevent it?

ANSWER: Plastic films such as the vinyls, cellulose acetate, Pliofilm and many others obtain their flexibility by varying amounts of plasticizer. The amount and type of plasticizer used will depend upon the end use of the film. In the case of acetate and some other films, an appreciable amount of moisture can be absorbed by the film itself when exposed to high humidity conditions. The results are that when plastic films of these classes are heated, there can be a loss of weight from moisture loss and if the heating is long continued, there can be an additional weight loss from evaporation of some of the plasticizer.

Changes in moisture content or the stability of the plasticizer are not usually problems in the packaging uses of plastic films. It may be that you are using too severe conditions of testing if you are getting appreciable weight losses from this source. In the testing of a package, it is sometimes necessary to use an induction period of from a few hours to perhaps a day to allow the package to come into equilibrium with the atmosphere on one side and the product on the other. During this period the package and its components may gain or lose weight, but then come to equilibrium with the two atmospheres for the remainder of the test period. If you can find some way of using this induction-period technique, you can then continue your test to determine the moisture change of

the product without having the gain or loss of the packaging materials affect the results.

Moistureproof wrapping

QUESTION: We are interested in the possibility of using a double over-wrap on one of our packages. We are not sure about the degree of moisture protection we will obtain if we use two wrappers of waxed paper instead of one. Your advice will be much appreciated.

ANSWER: Theoretically, the use of two layers of the same moistureproof barrier will double the moisture protection. For example, if a waxed paper has a water-vapor transmission rate of $\frac{1}{2}$ gr., two layers of such a material will give a water-vapor permeability rate of $\frac{1}{4}$ gr.

However, because of the effect of creasing, sealing, etc., there could be a considerable difference between theoretical considerations and practical results. In the first place, there would be two ways in which two wrappers could be applied. First, would be to apply the two wrappers simultaneously so that the overlap and folds are made together. The other method would be to apply one wrapper, seal it and then have it run through another wrapping machine. In the latter case, the seals would be separate and independent of each other. The latter method would probably give a somewhat greater moistureproofness, although the simultaneous application of two wrappers would probably be nearly as good and less expensive to perform.

It should be a relatively simple matter to run a group of samples using both a duplex and two independent wrappers and to test these under controlled humidity conditions against packages with a single wrapper. Such a test would give you practical and comparative results of what would

happen in the package and you could determine whether the cost would be justified by the results.

Preventing packaged-fruit mold

QUESTION: We have been testing various methods of packaging several different types of fruit. We have noticed, in many cases, that mold or rotting occurs in contact with trays or cartons, particularly if they are used with moistureproof wrappers. Is there any means of preventing this type of spoilage, since it could be a serious problem because of the time of storage and the amount of handling?

ANSWER: The molding or spoilage of fruits in contact with paperboard has been noted many times before where the product has been shipped in a moistureproof package.

All fruits have a considerable degree of resistance to mold growth or spoilage on their outer surfaces and this protective mechanism is normally quite effective. However, if the surface of the skin is abraded, as it could be with contact to paperboard during shipping, the abraded areas are extremely susceptible to mold growth or spoilage. Some benefits could be expected by the use of boards treated with antimycotic agents, but this is only a part of the problem. It might be more effective to dry wax the surface of the board so that the fruit would slip on the waxy surface and not abrade the skin. Of course, anything that could be done in connection with tighter wrapping or padding to prevent movement and so reduce abrasion would help.

There is probably a considerable difference in the physical resistance of skins of various fruits and also in the abrasion effects of different fibreboards, but in general any abrasion of the fruit surface is undesirable because it can promote several kinds of spoilage.



Production stepped up, product protected 100%

by wrapper coated with **Du Pont ALATHON***

*With coating of "Alathon,"
ice cream wrapper goes on quickly
—doesn't stick or flake—provides
better protection than ever before*

A maker of an ice cream novelty has capitalized in many ways on the packaging opportunities offered by coatings of Du Pont "Alathon" polythene resin.

One of the many useful properties of "Alathon"—its quick, sure heat-sealing—simplifies and speeds up the manufacturer's production. And "Alathon" provides better protection for his product, too. Because the package is heat-sealed at both ends, dirt is kept out. Dry ice "burns" on the ice cream have been eliminated by the new package.

What's more, the envelope-type wrap formerly used often stuck fast to the ice cream—now, the wrap coated with "Alathon" peels off in a jiffy! And the coating of "Alathon" won't flake or crack no matter how cold the freezer (even down to 70°F. below zero!).

Coatings of "Alathon" on packaging materials provide a unique combination of properties. "Alathon" is tough and scuff-resistant—chemically inert—tasteless, odorless and non-toxic—resists vegetable oils, acids, alkalies—stays flexible at low temperatures.

... Write for free booklet describing the properties and uses of "Alathon" in the packaging field. We'll gladly put you in touch with sources of supply

for packaging materials coated with "Alathon."

E. I. du Pont de Nemours & Co. (Inc.)
Polychemicals Dept., 1511M Du Pont Bldg.
Wilmington 98, Delaware

*REG. U. S. PAT. OFF.

DU PONT
REG. U. S. PAT. OFF.

150th Anniversary
Better Things for Better Living
... through Chemistry

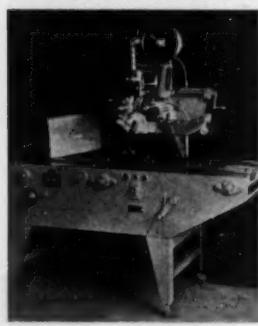
Polychemicals
DEPARTMENT
CHEMICALS • PLASTICS

Equipment and materials

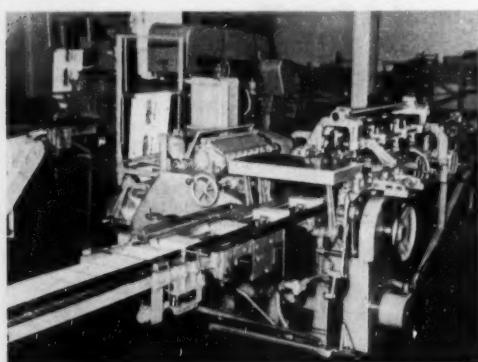
AN AUTOMATIC PACKAGE-TOP LABELER

recently announced by the Oliver Machinery Co., Grand Rapids, Mich., can be used in three ways: (1) as an independent unit, (2) with machines not having their own labeling units, or (3) as a part of a conveyorized packaging line. The machine,

No. 804-B, uses Oliver roll-type thermoplastic labels. It accurately heat seals a single die-cut label from the roll, according to the manufacturer, in any position on the top side of a cardboard box or in fact any package having a supported surface which is fairly uniform. The label is directly applied to the container or to a cellophane, glassine, wax or kraft paper overwrap, and a strong, perfect seal is said to be assured. Packages are automatically spaced and synchronized with the labeling mechanism by the automatic package transfer, which is an integral unit. Speeds range from 40 to 80 packages per minute. The machine handles packages 6 to 18 $\frac{1}{2}$ in. long, 2 $\frac{1}{2}$ to 10 in. wide, 1 $\frac{1}{2}$ to 7 in. high. It applies labels 1 $\frac{1}{8}$ to 3 in. cut-off, 1 $\frac{1}{2}$ to 3 $\frac{1}{2}$ in. long. Imprint items can be easily and quickly changed.



A HIGH-SPEED FROZEN-FOOD WRAPPING MACHINE that permits maximum production with the new continuous-motion frozen-food fillers manufactured by the same company has recently gone into quantity production at the Package Ma-



chinery Co., Springfield, Mass. The fillers, which have a speed of 300 packages a minute, have provision for discharge into two wrapping machines (which operate at speeds over 100 per minute). Model FF-H wrapping machine shown was designed to process the wrapper designs in current use. A notable feature is a "lift-up" overhead transport chain assembly that carries individual packages through the folding line of the machine. Another feature is the simple, efficient carton feeder unit. An automatic lubricating system is available if desired. Designed primarily to wrap the standard-sized carton, the Model FF-H can be adjusted to accommodate any carton from 1 $\frac{1}{2}$ to 1 $\frac{1}{2}$ in.

high, 5 to 5 $\frac{1}{2}$ in. long, and 4 to 4 $\frac{1}{2}$ in. wide. Change-over takes 10 to 15 minutes. The machine handles any type of wrapping material used for frozen-food wraps.

ROUND-BOTTOM POLYETHYLENE BAGS

for packaging all kinds of fowl are now available from Chase Bag Co., 5033 Southwest Ave., St. Louis, Mo. Known as Chase Polytex, the new bags come in a range of lengths and widths to fit any size of fowl. The company offers two-color stock designs printed in bright colors which are said to be highly resistant to flaking or rubbing; also available are private designs in one to four colors. Samples and further information may be had from the company on request.

A NEW TYPE OF VALVE DISPENSING UNIT

for aerosols, with valve and spray head furnished separately, is now in regular production at Pressure-Pack, Inc., Detroit 31, Mich. The spray head is interchangeable with all cans using the threaded valve unit, so that the product packager need not supply a spray head with each can. This reportedly permits worthwhile reductions in the retail price of the aerosol product. Another feature is the patented "Varispray" nozzle, now available in four types: (1) for paints, plastics and similar surfacing liquids, adjustable to a horizontal or vertical pattern which reportedly gives 30% greater coverage; (2) for marking liquids and paints; (3) for foam products; (4) for cosmetics, insecticides and pharmaceuticals (see illustration). The spray head can be removed, taken apart and cleaned by the user in 5 seconds, according to the manufacturer. The valve unit is both soldered and clinched to the can cover for safety and the can may be filled through the valve if necessary. Filled cans do not require protective caps, so that the cost is much lower when the head spray is sold separately.

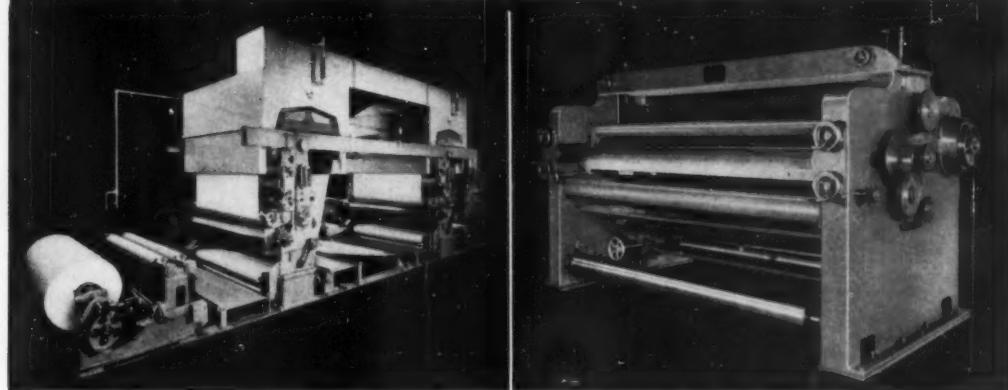


A NEW HEAT-SEAL BAG LABEL STOCK

has been developed by the Nashua Corp., Nashua, N. H., for use as a bag header or topper for transparent bags in the food and candy field. The new Imac BH stock is reported to have maximum temperature tolerance and pressure tolerance, instant complete activation. Claimed for the new Imac BH are maximum time, temperature and pressure tolerances, as well as fast-setting hot strength. They are reported to be non-responsive to moisture and high humidity, to have excellent storage characteristics and to be adaptable to all well-known types of printing, being printable on two sides. According to Nashua, using a $\frac{1}{2}$ -sec. pressure-dwell time and 5 lbs. of pressure per sq. in., Imac BH will produce a paper tearing bond immediately upon removal from the sealer over a temperature range of 270 to 425 deg. F. Nashua Corp. recommends the new label for saran, all grades of cellophane except PT, all grades of Pliofilm except highly plasticized grades and for treated polyethylene. No

Paper *plus* + ...by SORG

...GRAVURE PRINTING...ANILINE PRINTING...COATING and TREATING



For the past 100 years SORG has been a top name in the making of special papers. Now, to that ability to create specially-formulated base papers designed to meet your individual requirements, SORG has added these "PLUS mill services" — gravure printing, aniline printing, surface coating and saturating.

The PLUS of Gravure offers high speed, web-fed 2-color gravure printing on a wide range of base papers from strong industrial kraft to fine book paper. The PLUS of Coating offers precision application of synthetic resins, organosols, platisols, and elastomers on a range of specially-formulated base papers with unusual accuracy of treatments.

When planning your product and packaging consider the advantages and economy of "Paper Plus... by Sorg." Call in your nearest Sorg Representative for a consultation on your problems—or write Product Development, Dept. PX, of the Sorg Paper Company.



1852-1952—100 Years of Service To The Users of Printing and Converting Papers





are your customers
getting these advantages
of a **Lined Carton?**

If you're interested in customer satisfaction, you'll be interested in protecting your product from moisture, dust, air or corrosion. That means you should consider a *lined* package for your product.

Initial business and repeat business is at stake — because you know that user experience with your product is extremely important in selling more of it.

Peters Way Provides Answer

With the Peters Way of Packaging . . . using top-opening, *lined* cartons . . . you give your customers what they want in product protection. Peter Packaging machinery automatically forms, lines, folds and closes your cartons . . . speedily and efficiently . . . with the liner completely enclosing the carton contents.

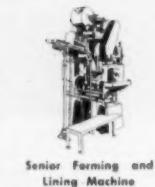
Your products deserve this kind of protection. You get it completely when you package the Peters Way. Investigate soon.



MACHINERY COMPANY

4712 Ravenswood Ave.
Chicago 40, Illinois

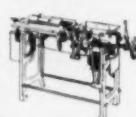
Write for your free copy of helpful booklet, "How to Make Cartons Easier to Open and Close . . . and Gain Advantages of LINED Cartons."



Senior Forming and Lining Machine



Model CCY Folding & Closing Machine



Junior Forming and Lining Machine

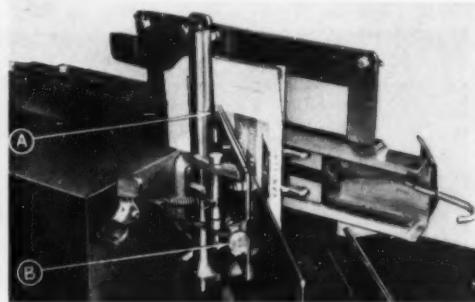


Equipment and materials

moisture sensitivity has been found in Imac BH, according to Nashua, up to 90% R. H. over prolonged intervals of time under normal storage conditions. The bag-header label stock is being distributed through Nashua's franchised merchants.

ADJUSTING ICE-CREAM-CARTON OPENINGS

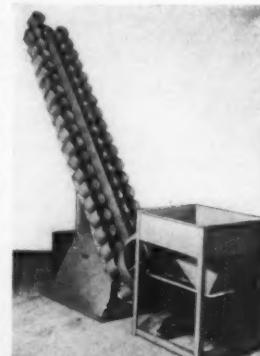
is simplified by a new attachment for use on the Anderson Bros. Mfg. Co.'s ice-cream-filling machines (Models 145 and 175). The new attachment permits the adjustment of the open-



ing to take care of different thicknesses of board and glue flaps. It eliminates the necessity of stopping the machine to make such adjustments. Attached to the carton hopper, the device (A on illustration) simplifies the adjustment to a single thumb-screw operation (B) which permits mitering of the cartons while the machine is in operation. It was developed by Marathon Corp., Menasha, Wis., manufacturers of cartons and other food packaging, in cooperation with Anderson Bros. Mfg. Co., Rockford, Ill.

A NEW TYPE OF ELEVATOR LIFT

for packaging and materials-handling machinery recently developed by the U. S. Engineering Co., 40-24 22nd St., Long Island City, N. Y., is reportedly based on a completely new yet simple principle. It lifts small parts like nuts, bolts and screws or items like cookies and candies from a hopper at floor level to a point any distance above. The new "Lift-O-Matic" eliminates "dumping" of parts occurring in belt- or bucket-type elevators. Items are quietly and gently released through a hinged gate at the bottom, thus providing quiet operation, precision deposition (no scattering of items on floor or on other equipment), reduced breakage and utilization of minimum space requirement. There are few parts to wear. The Syntron feeder assures a metered flow of items into a revolving hopper having holes communicating with openings in lift buckets, which move up the elevator on one side and down on the other. The bottom of each bucket has a hinged plate which rides on a rail. Near the elevator top the rail ends,



Like a pod...



a fine tube...

protects quality

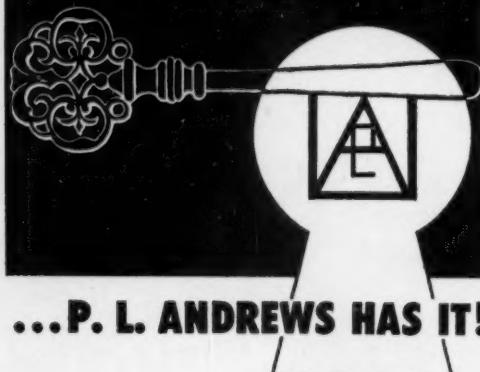


For dependability, appearance and economy
many of America's leading manufacturers choose

ALCOA Aluminum Tubes

ALUMINUM COMPANY OF AMERICA
1752-L GULF BLDG. • PITTSBURGH 16, PA.

Here's the key to specialty envelopes packaging problems



...P. L. ANDREWS HAS IT!

When price is a "make or break" factor in packaging, P. L. Andrews specialty envelopes often save the day by providing the necessary

PROTECTION - DISPLAY - APPEARANCE

at lower cost than alternative package forms.

Odd Shapes, Styles and Sizes—Don't let tradition-bound concepts of envelope design stop you from acting wisely. P. L. Andrews combines tricky design features and unusual materials into packaging envelopes that do jobs no other envelopes ever did so well before.

If costs must be considered . . . so must P. L. Andrews envelopes. Our designers can help you. Call on them—no obligation.

glossine
cellophane
metal clasp
string and button
phone record sleeves
phone album

sift proof
window
fling jackets
gusset type
compartment
Armor-Edge Mailers*

special sizes and shapes
government specification

* Patent Pending



P. L. ANDREWS CORP.

1328 Broadway • New York 1, N. Y.
The House of Envelope Specialties

Equipment and materials

so that the bottom gate swings open, depositing the items into the receptacle provided. As the buckets come around the end of the elevator, the bottoms are cammed closed. Capacity of the standard model is 7,500 lbs. of steel per hour.

AN AUTOMATIC VIAL AND BOTTLE CAPPER

has been developed by Doran Bros., Inc., Danbury, Conn., which, with modifications, will perform a number of difficult

closure operations. The Model "PCA" shown is set to stopper 12-dram vials with OS-5 polyethylene stoppers at a rate of 90 per min. The same machine can insert OS-5 stoppers in 5-dram vials at a rate of 120 per min. The basic unit can be adapted to handle caps and stoppers to $1\frac{7}{16}$ in. in diameter in a range of vial and bottle sizes and, with additional mechanical components, can completely and automatically bottles the atomizing units such as are used in deodorant packages, etc. Selector plates and tracks can be designed to hopper unique cap and stopper shapes.

A NEW STRAPPING MACHINE

which moderately compresses a package and simultaneously applies up to three steel straps is being manufactured by the Acme Steel Products Div., Acme Steel Co., 2840 Archer Ave., Chicago 8. Designed primarily for the textile industry, the machine has proved useful for any application where compressed packages must be strapped quickly and economically, according



to the manufacturer. Known as Model F-3, it features a movable platen with controlled compression and the ability to secure one, two or three steel straps with independently controlled compression and tensioning of each strap. The machine is installed with relative ease, the maker claims, and may be combined easily with existing standard conveyor installations. It accommodates cases not larger than 50 in. wide or 53 in. high, uncompressed, using standard Acme Steelstrap in $\frac{3}{8}$ -in.

*M*akes good merchandise
sell better . . .

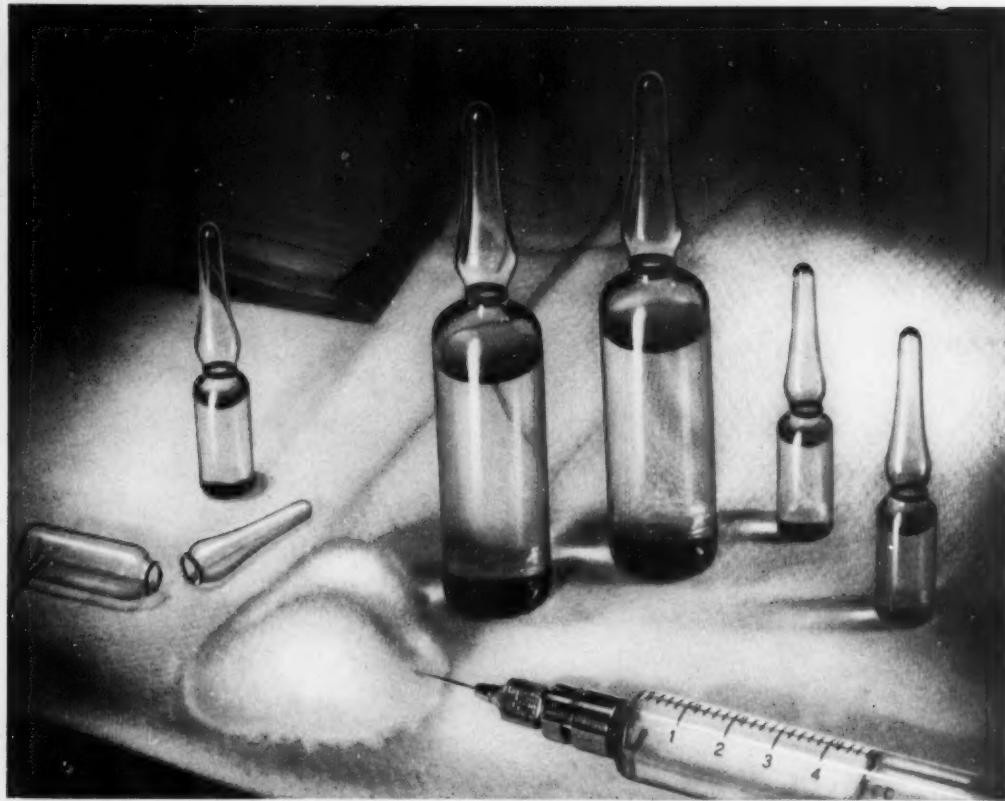
Kodapak Sheet is brilliant . . . crystal clear, gives added glamour and sales appeal to whatever product it packages. In fabrication, it is free from defects and always efficient and economical to use.

For further information, consult your local representative or write:
Cellulose Products Division, Eastman Kodak Company, Rochester 4, N. Y.
Sales offices: New York, Chicago, Dallas. Sales representatives: Cleveland, Providence, Distributors: San Francisco, Los Angeles, Portland, Seattle
(Wilson & Geo. Meyer & Co.), Toronto, Montreal. Paper Sales, Ltd.
Cosmetica, Southern Corp., Inc.

Kodapak Sheet

"Kodapak" is a trade-mark





Grip . . . bend . . . snap—Kimble Color-Break Ampuls are ready to use.

NEW!

NEUTRAGLAS COLOR-BREAK* AMPULS **snap off at the color line !**

No Filing . . . No Scoring . . . No Sawing !

Now, at last, you can package in ampuls that need no filing.

Just hold a new Neutraglas Color-Break Ampul in your hands, bend it, and the stem snaps off. Presto, it's ready for use. Think of the valuable time you can save the users

* Trade mark

of your products with this package.

The secret of this revolutionary Kimble development—the result of nine years' work—is in the patented blue color band around the neck of the ampul. This color-break feature is the greatest improvement in am-

puls since the development of Neutraglas containers.

Neutraglas Color-Break Ampuls are inert to their contents. Solvents, chemicals, sterilizing agents—even distilled water—find these ampuls persistently indifferent to chemical action. Decide today to modernize your ampul package.

KIMBLE GLASS COMPANY

Subsidiary of Owens-Illinois Glass Company



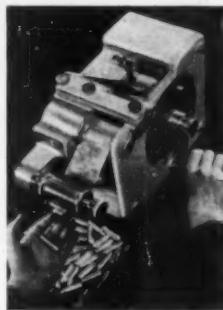
Toledo 1, Ohio

MODERN PACKAGING

•Equipment and materials

and $\frac{1}{8}$ -in. widths from 0.015 to 0.023 in. in thickness. The F-3 is operated by one man at a push-button control board mounted on the unit. The 110-volt, 60-cycle control circuit governs five machine operations: raising the platen for case clearance; feeding the strapping to the required length; lowering the platen to compress the package; tensioning and sealing the strapping. Compressed air at 50 p.s.i. is needed to power these operations. Pressure is easily regulated, Acme states, to deliver desired platen pressure or strapping tension.

CYLINDRICAL, EGG, BALL OR TORPEDO SHAPES, can be wrapped on Aupama's Model No. 67 wrapping machine at speeds up to 1,500 per hour. Especially designed to wrap aluminum and paper-foil laminates, the unit is adjustable to products over an extensive range of sizes and shapes, including lipsticks, shaving sticks, suppositories and other soft, delicate products. One operator is needed. The machine is available with interchangeable parts for products of different size. For further information on the new machine, write the Pharmaceutical & Chemical Industry Supply Corp., Div. of American Roland Corp., 16 Hudson St., New York 13, N. Y.



WET-STRENGTH GLASSINE AND GREASEPROOF PAPERS in the Aqua-Tuf line of the Rhinelander Paper Co., Rhinelander, Wis., are now available in greatly increased quantities and in a much wider variety of grades, the company reports, as a result of new equipment installation. The company recommends its Aqua-Tuf line of papers particularly for vegetable, butter or shortening wraps, milk-can gaskets and other applications where there is both a grease problem and the existence of a high degree of liquid moisture.

A SQUARE CONTAINER FOR BULK ICE CREAM introduced at the Dairy Industries Supply Exposition in Chicago last September and known as the rigid Square-Pak is made of specially designed corrugated paperboard with a wax-treated bleached kraft liner. It has three parts—the square container, a bottom insert and the separate top. Plastic carrying handles for the container may be used if desired. Outside dimensions are 9% by 9% by 9% in. (3½-gal. capacity). It can be printed in one or two colors on the sides. The result of joint research by



Marathon Corp., Menasha, Wis., and International Paper Co., Container Div., the new containers will be manufactured by International and merchandised by Marathon. Among the reported advantages for the ice-cream manufacturers of the square shape are: (1) it can be used on existing packaging equipment; (2) all three parts ship and store flat; (3) it sets up quickly by hand or by machine without the need for forming equipment; (4) it has an exclusive bottom closure lock; and (5) strong side-

LABEL SEAL-IT

FOLDS-SEALS

LABELS



CUTS LABOR COSTS! Label Seal-It takes the hand-work out of packaging... eliminates pins and stapping. *One operator does the work of two!* These savings alone actually pay for Label Seal-It in a few short months. Cuts label expense too... uses ordinary printer's enamel stock instead of special thermoplastic coated papers. Seals all heat sealable bag materials—Cellophane Polyethylene, Pliofilm, etc.

NEWLY IMPROVED—now equipped with latest type vacuum pickup which insures individual label feeding! Built-in cam driven pump—no extra vacuum equipment to buy.

Let us prove Label Seal-It is your best buy!
Full line of Heat Seal-It machines available.

★ **GLOBE** ★
HEAT-SEAL, INC.
HEAT-SEAL DIVISION

Write for Circular

3380 SOUTH ROBERTSON BLVD., LOS ANGELES 34, CALIFORNIA

For packaging
that will
open purses



employ the Magic of

Rayco Flock



Write for sources of Rayco Flock-coated velour papers, standard and Day-Glo shades. DESCRIPTIVE CIRCULAR AVAILABLE.



Equipment and materials

walls do not bulge when filled. Advantages for ice-cream dealers are reported as: (1) a 40% increase in storage capacity; (2) elimination of "spin" during scooping; (3) better "fracture" of the cream from container side walls; (4) reduction of frost accumulation; (5) no metal to scratch cabinet; and (6) fits more than 70% of the fountains and cabinets in use today.

A NEW ONE-PIECE LID FOR PAPER CONTAINERS which is reported to result in better packaging of cottage cheese and other dairy products has been announced by Lily-Tulip Cup Corp., 122 E. 42nd St., New York. Designed for 8-, 12- and 16-oz. sizes, the new lid covers the container rim and, by means of an internal seat and groove, locks firmly into place. It is more convenient, the company reports, is easier to remove and can be snapped into place



either manually or with any standard capping machine now in use in the dairy industry. In addition, the consumer can see that it's tight and contamination-proof.

PRECISION-ROLLED STAINLESS-STEEL STRIP

for use in corrosion-resistant containers and other packaging applications is now available from the Industrial Division, American Silver Co., Inc., 36-07 Prince St., Flushing 54, N. Y. Strips up to 8 in. wide and down to 0.0005 in. thin rolled to precision tolerances as close as ± 0.0001 in. are reported available from the company in any quantity from one pound to thousands of pounds.

A RAPID VOLUME CALCULATOR

which calculates the volume of a package from its dimensions in inches is announced by the Graphic Calculator Co., 633 Plymouth Court, Chicago 5. Made of a rigid sheet of Bakelite Corp.'s Vinylite plastic in disk form, the calculator provides a handy way of determining the cubic feet of shipping space required for a package from its length, width and height in inches. In quantity orders, the names of business firms can be imprinted on the calculators for remembrance advertising purposes.



ONE-TRIP GLASS CONTAINERS FOR DAIRY PRODUCTS are now being offered to dairies and jobbers in half-pint, pint and quart sizes by the Dairy Container Division of Owens-Illinois Glass Co., Toledo 1, Ohio. The jars do not replace the standard deposit jars made in heavier weights, the company points out, but compare favorably price-wise with the heavy waxed-paper containers in current use. Advantages cited are: (1) glass prevents flavor absorption of dairy products; (2) yogurt can be incubated in glass; (3) jars fit into regular delivery cases or can be supplied in 1-



TALL

Containers!

QUALITY
AND SERVICE
ARE STRESSED
FACTORS . . .

TALL CONTAINERS MAY BE ADAPTED
TO NUMEROUS TYPES OF PRODUCTS,
FACILITATING PACKAGING AND SHIP-
PING AS WELL AS CONTRIBUTING TO
SHELF EYE-APPEAL WHEN AN AT-
TRACTIVE DESIGN IS USED.



IN THE PRODUCTION OF THESE CONTAINERS
WE USE THE UTMOST CARE THROUGH THE
ENTIRE PROCESS, WHETHER THE NUMBER BE
GREAT OR SMALL.



Quality **OLIVE CAN COMPANY** Service
MANUFACTURERS • DESIGNERS
PLAIN • LITHOGRAPHED
METAL CONTAINERS
450 N. LEAVITT ST., CHICAGO 12, ILLINOIS



These "Sunshine Butter Macaroons" attractively displayed in Crystal Tube packages have that "fresh-from-the-oven" appeal . . . and the transparent cellophane bag helps keep them that way! These glistening cookie packages are typical of the way Crystal Tube shows your product to its best advantage—to make customers buy-conscious of your trademark. This dual emphasis sparks up sales . . . and profits! There's no obligation for ideas or suggestions when you call for Crystal Tube's friendly, reliable service. Why not write us today.



making things *Crystal* clear

**CRYSTAL TUBE
CORPORATION**
6625 W. DIVERSEY AVE., CHICAGO 35, ILL.
Phone NAtional 2-4800

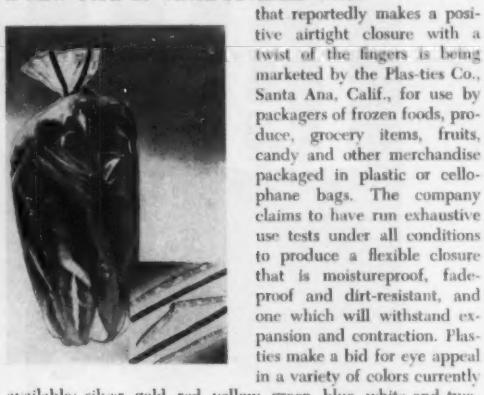
Branch Offices in New York, Philadelphia, St. Louis, Minneapolis, Detroit, Louisville, Milwaukee, Dallas and Los Angeles.

Cellophane Tubes, Batches, Bags and Envelopes, Polyethylene Bags, plain and printed. Also printed roll stock and sheets in Cellophane, Polyethylene, Acetate and Foil. Pliofilm Utility Rolls. Holiday Bands and FLEXIBLE BARRIER MATERIALS

Equipment and materials

and 2-doz. packs for out-of-town shipments or deliveries to wholesalers. The jars are washable in regular dairy-plant equipment.

A NEW TYPE OF VINYL-COVERED WIRE



available: silver, gold, red, yellow, green, blue, white and two-color combinations. They can also be trade imprinted. Sizes range from 4 to 16 inches.

A NEW METHOD OF BANDING FRESH PRODUCE

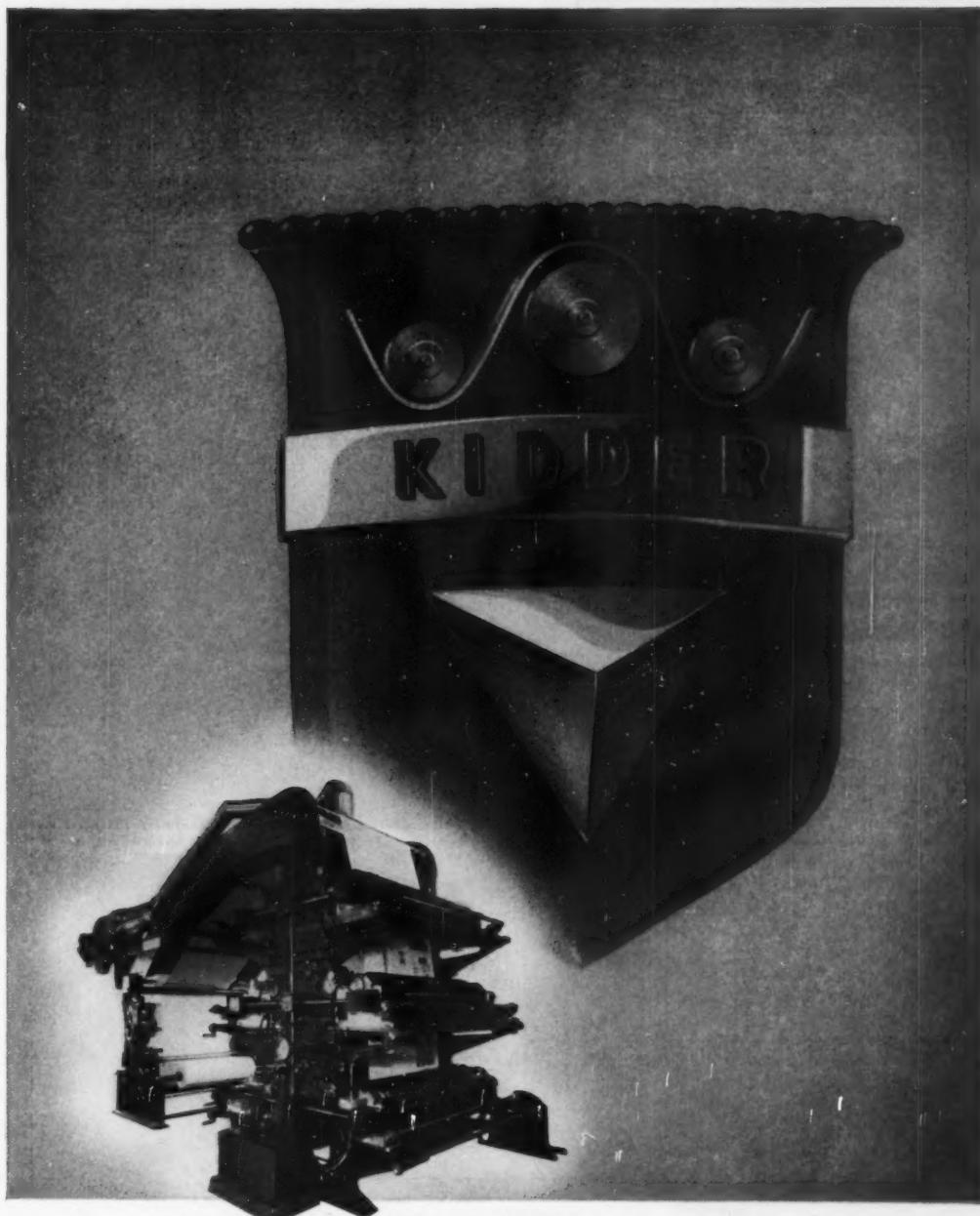
such as celery, asparagus, romaine or corn, devised by The Denton Corp., 2124 Livingston St., Oakland 6, Calif., manufacturers of transparent packaging, is reported to enable eco-



New machine (left) used to band fresh produce in new Pliofilm wrap. Illustrated above is celery being banded by the new method.

nomical Pliofilm wrapping of such products at the rate of 15 or 25 bunches per minute by one operator. With a special heat-sealing and wrapping machine, a bunch of celery can be wrapped with a printed, glued-on paperboard advertising band 2 in. wide and as long as the film is wide, using a Pliofilm roll up to 12 in. in width. Banding celery by this method permits brand-name identification of the product, reduces the possibility of mutilation of the celery, permits trimming, provides space on the band for price marking and maintains freshness of the product. The roll of film runs through a machine to attach the printed paperboard band to the film at spaced intervals and is re-rolled. These rolls are shipped direct to the packer for use on the new wrapping machine. The machine heats the film and paperboard strip, cuts off the wrap from the roll, instantly placing in the hands of the operator the means of completing the wrapping operation. The heated end of the wrap immediately seals to the cold end as the wrapping operation is completed. This sealing of hot to cold film is the basis of the new Denton

(Continued on page 160)



In every field there are recognized leaders to whom quality of product is the supreme consideration.

To such leaders in the packaging and converting fields, Kidder presses and slitters have long constituted the standard by which other equipment is judged. In Kidder multi-color rotary presses for aniline, rotogravure, and letterpress, nothing is spared to achieve the known requirements for perfect printing. In slitting, Kidder's shear-cutting action results in clean, accurate, dustless rolls.

For information concerning the finest equipment to fill your converting needs, write:

KIDDER PRESS COMPANY, INC., DOVER, NEW HAMPSHIRE • EMPIRE STATE BUILDING, NEW YORK 1, NEW YORK
MACHINERY SERVICE CO., LOS ANGELES 22 CALIFORNIA

Kidder
PRESSES • SLITTERS

IMPORTANT! VISQUEEN film is all polyethylene, but not all polyethylene is VISQUEEN. VISQUEEN is the only film produced by process of U.S. Patent No. 2461975. Only VISQUEEN has the benefit of research and technical experience of The Visking Corporation, pioneers in development of pure polyethylene film.

BREAKAGE?

The **COL-R-CORN Corporation**, makers of Col-R-Corn popcorn put it this way . . . "we cannot help but notice VISQUEEN film is definitely superior in uniformity of wall thickness—very important to us in our bag closing operation, and important to the customer because this uniformity means better protection and less breakage."



VIS

See a VISQUEEN converter...
VISQUEEN and VISQUEEN converters work as a team to create better packaging for you—at lower cost. Mail the coupon for a list of VISQUEEN converters operating in your vicinity.

NOT WITH VISQUEEN!



*Truck turns over—
yet out of 19,200 bags of
popcorn, less than one dozen
damaged in any way!*

It was an accident when a Col-R-Corn truck turned over, dumping a load of 19,200 bags of popcorn. But it was no accident that less than a dozen packages were damaged, and the remaining 19,190 VISQUEEN film bags and their contents were in perfect condition despite the crushed cases and the sudden, slam-bang impact. For VISQUEEN has a remarkable uniformity and strength (a uniformity unduplicated by any other film on the market).

It adds up to this: With VISQUEEN you've got a package that won't fall apart—a package that's going to get to market looking good and keeping the product in good condition.

QUEEN*

*VidQueen** film . . . a product of the
VISKING corporation

World's largest producers of polyethylene sheeting and tubing
Preston Division, Terre Haute, Indiana

In Canada: Visking Limited, Lindsay, Ontario

*T. M. The Visking Corporation

Feel a piece of VISQUEEN film,
feel the body to it. It's neither
limp nor stiff. That means
VISQUEEN is easier to handle on
machines and easier to fabricate.
VISQUEEN never "blocks" or sticks
together. And VISQUEEN has super-
ior "slip"—the ease of slipping
products into bags or bags into
containers that saves you time,
money and labor.

THE VISKING CORPORATION, BOX H11-1410

Preston Division, Terre Haute, Indiana

Please send names of VISQUEEN converters in my area.

Name.....

Company.....

Address.....

City..... Zone..... State.....



This ELEC-TRI-PAK gives you packaging IDEAS

If you have weighing and filling problems, take a look at this ELEC-TRI-PAK to get solution-finding ideas.

User reports indicate how it eliminates problems . . . and saves time and money. One says: "We would hate to be without our eight ELEC-TRI-PAKS. As you know, we have ordered two more." Another reports: "We fill without worries of over or underweight."

Guaranteed accuracy and speed

We don't just make claims for the ELEC-TRI-PAK . . . we guarantee accuracy and speed. This assures you of substantial savings . . . more than you need to justify ELEC-TRI-PAK purchase NOW. Use the handy coupon below to get ALL the facts.

TRIANGLE Package Machinery Co.

6640 West Diversey Ave., Chicago 35, Ill.

Sales Offices: New York • Newark • Boston •
Baltimore • Atlanta • Dallas • Denver •
Los Angeles • Portland • Montreal • Mexico City

— RETURN COUPON FOR FREE FACTS —

To Triangle Package Machinery Co.
6640 W. Diversey, Chicago 35

Please send complete information about your newly improved
ELEC-TRI-PAK Weigher.

Name Title
Company
Street Address
City Zone State

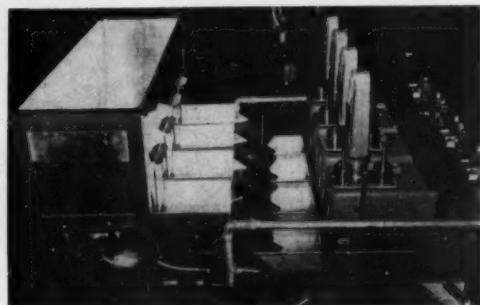
Equipment and materials

(Continued from page 156)

patent. The Dent-O-Rap wrapping machine is available to packers on a lease basis. It is a small, compact unit occupying only 17 by 29 in. of space and weighs about 250 lbs.

A NEW NET-WEIGHT SCALE FEED

especially designed by Transparent Wrap Machine Corp., Hasbrouck Heights, N. J., for their Transwrap machines completes



the range of possible feeds for use on this equipment. Volumetric, auger and liquid feeds have been available as standard Transwrap equipment for some time. The new net-weight scale feed will operate on Models B and C Transwraps for the packaging of hard candies, wrapped or unwrapped; nuts, cookies, crackers, cocktail bits, produce, gum drops and similar products. Special features of this equipment are its close tolerance under full production conditions, the flexibility of products it will handle, its operation in synchronization with the sealing stroke and the compactness of its design.

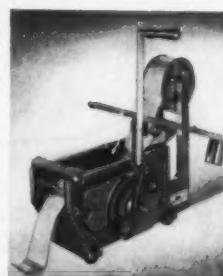
Integrated in the new feeding mechanism are four Speed Weigh Toledo indicator scales activated by Syntron vibrators.

The stroke of the bag making and sealing on the models B & C is cycled by each drop of product into the feeding head with Warner Electric motion control. Thus, packaging production is limited only by the speed of weighing required for each type of product and empty packages will not occur. In operation for the bagging of 6 oz. of wrapped chocolates, each piece approximately $\frac{1}{2}$ oz., production of 52 bags per min. is reported with weight variations of minus nothing, plus one piece.

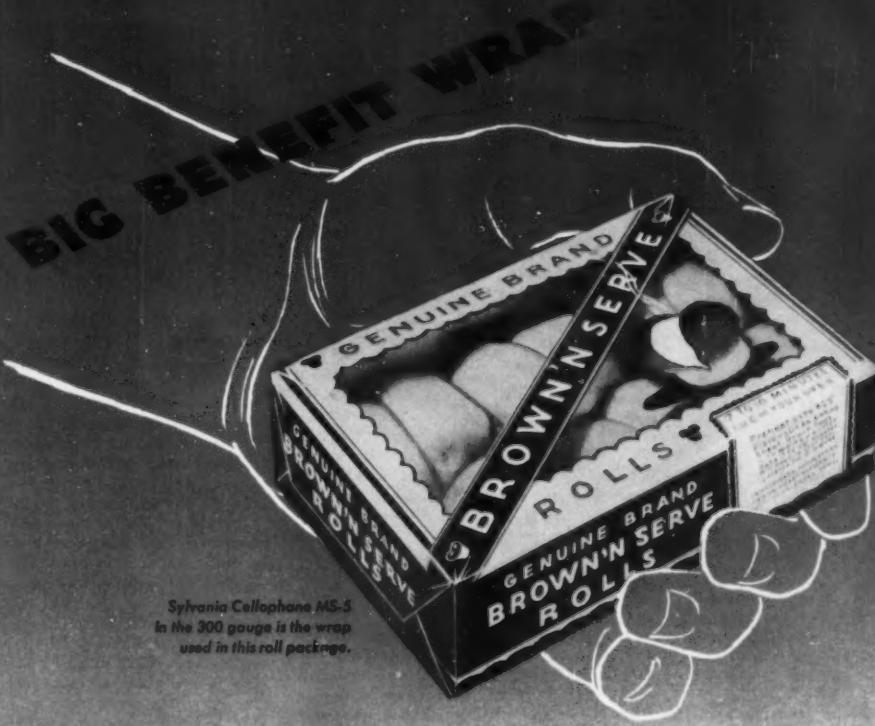
The company offers a complete line of possible product feeds with basic equipment for making packages of pillow and fin styles from $1\frac{1}{2}$ in. square up to 9 by $13\frac{1}{2}$ in.

A NEW TYPE OF LABEL DISPENSER

for feeding tape-laminated labels ready to apply has been developed by Bruss Mfg. Co., Ltd., division of Bro-Dart Industries, 59 E. Alpine St., Newark 5, N. J. This mechanism, called "Protex-It," simplifies several complicated labeling operations, according to the manufacturer. The holder is first loaded with the labels, already addressed. Then with one downward stroke of the handle, the pressure-sensitive tape automatically picks up and feeds each label, ready to apply. Every label is laminated and centered under transparent tape, thus eliminating the risk of smudged addresses or of fading through excess handling.



SYLVANIA CELLOPHANE



Sylvania Cellophane MS-5
in the 300 gauge is the wrap
used in this roll package.

"Exactly what are the unusual sales-building benefits offered by Sylvania Cellophane?" bakers of brown 'n' serve rolls and biscuits asked us.

"It is moisture-resistant," we said. "It safeguards quality from your hands to the customer's table. It beautifies packaging—crystal-clear transparency permits immediate identification of your product. It protects freshness and flavor—prevents infiltration of dust, dirt and harmful

vapors—discourages pilfering, tampering, excessive handling." Sylvania Cellophane gives you a combination of benefits that helps your product sell faster—makes your packaging dollar go further.

Perhaps you can extend your present supply of cellophane, either through improved package design or the use of a different type or gauge.

For information, write our Market Development Department.

SYLVANIA DIVISION AMERICAN VISCOSA CORPORATION



General Sales Office:
1617 Pennsylvania Blvd.,
Philadelphia 3, Pa.

Plants and people

E. J. Farina has retired from active service with Fibreboard Products, Inc., San Francisco, after 32 years with the company. **B. P. Altick** succeeds Mr. Farina as vice president in charge of sales for Fibreboard Products. Mr. Farina will con-



*E. J.
Farina
(left) and
B. P.
Altick*

tinue his association with Fibreboard as a sales consultant. Mr. Altick and **William L. Keady** have been elected to the board of directors, filling in vacancies created by the resignations of Mr. Farina and **C. C. Gibson**.

M. M. Neal has been made sales manager of the company's new Inter-Mountain District sales division, with headquarters at Salt Lake City.

The United States Printing & Lithograph Co., Cincinnati, Ohio, manufacturer of labels and wrappers, folding cartons and other packaging materials, has acquired the label and wrapper division of the **Meyercord Co.**, Chicago. The transaction involved the outright purchase of the good will and inventory of the Meyercord label and wrapper division. Sales personnel of Meyercord will be retained by U. S. Printing & Lithograph.

Kenneth J. Moore & Co., Chicago, manufacturers of gluing, labeling and coating machinery, have been appointed United States sales agent for Beasley, French & Co., Ltd., of Bristol, England. Beasley, French manufacture "Fenanco" paper converting machinery.

Filtrol Corp., Los Angeles, has appointed **Dr. F. J. Ewing** as director of its recently expanded research department.

Robert B. Secor, who has been named as administrative assistant to **Gustave E. Kidde**, manager of manufacturing and technical departments. In his new position Dr. Ewing will direct research activities.



F. J. Ewing

G. L. Glespen has returned to the **American Cyanamid Co.**, New York, after a 10 months' leave of absence during which time he served as chief of the Chemicals, Containers and Packaging Branch of the

Petroleum Administration for Defense, Materials Div. Mr. Glespen is now assistant to the manager of American Cyanamid's Petroleum Chemicals Department.

Ball Bros. Co., Inc., Muncie, Ind., has appointed **Sterling Wardell** as product and advertising manager for the company's Consumer Products Div. Mr. Wardell will be in charge of all advertising, sales promotion, product specifica-



*S.
Wardell
(left) and
T. C.
Jones*

tions, new product development, consumer services and canning research in the consumer products field. **Thad C. Jones** has been named field sales manager and will supervise consumer sales activities of Ball representatives in five districts and 28 territories. **Burnham B. Holmes** is now general manager of paper, purchasing and traffic. **George H. McGowan** has been appointed manager of the Paper Products Div.

Mr. Holmes, in addition to managing the company's activities in the field of paper and corrugated box manufacture, will be responsible for all Ball purchasing and traffic in the manufacture of glass, rubber, and metal products. Mr. McGowan will be responsible for operations of the corrugated box plant at Muncie, and paper manufacturing at Noblesville, Ind.

Kimberly-Clark Corp., Neenah, Wis., recently held a three-day school for distributors selling Kimberly-Clark industrial wadding products.

The Rhinelander Paper Co., Rhinelander, Wis., manufacturer of glassine and grease-proof papers, has appointed **Paul G. Lee** as sales representative for the Southwest Territory, with headquarters in Dallas.

John Duncan, Jr., has been promoted to director of trade relations for **Owens-Illinois Glass Co.**, Toledo, Ohio. Mr. Duncan will handle special assignments for all units of the company and will report to **Hugh C. Laughlin**, vice president and general manager of the Administrative Div.

Aluminum Foils, Inc., New York, has appointed two district salesmen for its recently opened offices in Chicago and

**W. F.
Kauf-
mann
(left) and
G. B.
Proud, Jr.**



Cleveland. **William F. Kaufmann** is district salesman for the Chicago area, with offices at 69 W. Washington St., and **George B. Proud, Jr.**, has been appointed salesman for the Cleveland office.

Jiffy Mfg Co. of Hillside, N. J., manufacturer of padded packing materials, has announced the return of **C. F. Johnson** from military service. Mr. Johnson has resumed his duties as assistant sales manager in the Industrial Div. **John D. Farrington, Jr.**, has been appointed by Jiffy as packaging engineer.

Lee M. Butler, display specialist, has joined **Oberly & Newell**, display lithographers of New York as sales executive.

Bruce M. Stern has been appointed sales representative of **National Container Corp.**, New York, manufacturer of corrugated shipping containers.

Inland Steel Container Co., Chicago, has announced the appointment of **John H. Strome** as sales manager and **Thomas T. Crowley** as assistant to the president.



P. H. Bennett

The Dobeckmum Co., Cleveland, Ohio, has appointed **Paul H. Bennett** Southern Div. sales manager. He will headquartered in Atlanta, Ga. **Richard H. Hershberger**, formerly with Dobeckmum's Packaging Sales Div. in Cleveland, will assist Mr. Bennett in Atlanta.

William P. Hicks has been appointed vice president of the General Sales Div. of the **Gaylord Container Corp.**, St. Louis, Mo. Mr. Hicks has been with Gaylord since 1937.

Gaylord has acquired a 10-acre tract of land at Union and Bircher Blvds. in north St. Louis on which the company plans to erect a corrugated and solid fibre box plant. The structure will house the corrugated and solid fibre manufac-

keep this valuable library of
packaging information
at your fingertips always...

it's yours for
the asking...

This 14-volume set of booklets on corrugated packing and packaging contains information you can use every day. It's the famous H & D "Little Packaging Library" . . . The "Library" is a summary of the successful packaging experiences of hundreds of manufacturers . . . a series of studies of efficient shipping and packaging methods published in the interest of cutting packaging costs, improving product protection and merchandise promotion. Write, or mail coupon below, to Hinde & Dauch, 4514 Decatur St., Sandusky, Ohio.

H & D

HINDE & DAUCH

Quality on Packaging

Akron, Baltimore, Battle Creek, Mich., Bloomington, Ill., Buffalo, Chicago, Cincinnati, Cleveland, Columbus, Denver, Detroit, Fairfield, Conn., Findlay, Ohio, Gloucester City, N. J., Greensboro, N. C., Hoboken, Indianapolis, Jamestown, N. Y., Kansas City, Lenoir, N. C., Minneapolis, Omaha, Plymouth, Ind., Reading, Pa., Richmond, Va., Roanoke, Va., Rochester, Sandusky, Ohio, Shrewsbury, Mass., St. Louis, Toledo, Watertown, Mass.



partial list of titles:

- How To Use Color On Corrugated Boxes
- How To Pack War Materials
- How To Ship By Air
- How To Specify Corrugated Boxes
- How To Ship Heavy Products
- How To Prepak In Corrugated Boxes

mail today!

HINDE & DAUCH, 4514 Decatur Street, Sandusky, Ohio
Please send me a complete set of "Little Packaging Library" Booklets.

NAME _____ TITLE _____

COMPANY NAME _____

ADDRESS _____

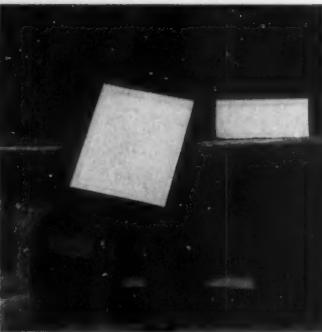
CITY _____ ZONE _____ STATE _____

MCLAURIN-JONES
Product

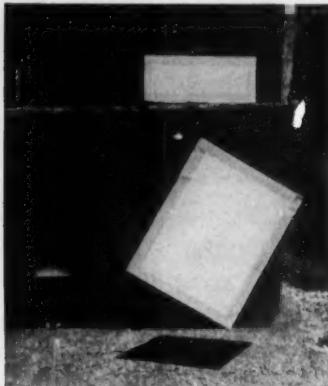
Could your present tape take this SPEEDING TRUCK TEST?



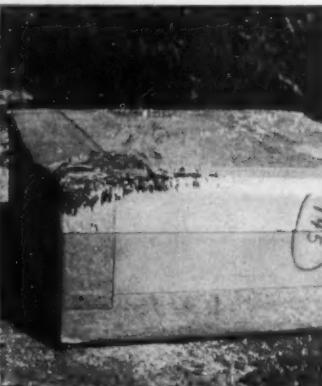
BEFORE TEST carton is sealed with Glaskraft Sealing Tape. Imbedded with glass fibers, Glaskraft has a tear-test strength averaging four to five times greater than 60 lb. kraft.



THERE IT GOES! One hundred and forty-five pounds of carton dropping from the back of a speeding truck. A tough test? Sure! But watch how Glaskraft can take it!



FIRST BOUNCE! Hitting the pavement — the carton bounces off one corner. This puts plenty of strain on the Glaskraft Sealing tape. Everything inside that carton is trying to spread out!



A LITTLE SCUFFED, BUT NO BREAKS! Every tape-sealed seam is still strong and sturdy. Yes, Glaskraft Sealing Tape has what it takes . . . plenty of strength! This test proves it!

Think of how you can cut your carton damage and shipping losses with Glaskraft Sealing Tape.

In addition to its remarkable strength and toughness, Glaskraft is water resistant. It will not rot or weaken even in damp storage. Send for your free sample coil of Glaskraft — plain or printed — today. Test it yourself!

McLAURIN-JONES CO.

MAKERS OF FAMOUS TANOLEFOOT AND BLUE STAR SEALING TAPES, GLASKRAFT STRAPPING TAPE,
IDEAL GUMMED AND HEAT SEAL STAY TAPES AND BOLSEAL WATERPROOF TAPE
BROOKFIELD, MASS.

Mills located at Brookfield and Ware, Mass., Grand Rapids, Michigan and Homer, La.

Plants and people

turing activities now carried on at 2820 S. 11th St., and at 143 Arsenal St., the St. Louis Sales Div. offices and the Research and Development Div.

J. W. Couture has been promoted to the position of Northeastern sales manager of the Black-Clawson Co., Hamilton,

Ohio. Mr. Couture will represent and supervise the sales of products of all divisions of Black-Clawson. The Northeastern territory includes all of New England plus New York, New Jersey and Pennsylvania. Mr. Couture will headquartered at the Dilts Machine Works Div. office. District sales engineers A. J. Felton, Jack McKela and W. T. Schnick continue to serve their districts under Mr. Couture.

Anchor Hocking Glass Corp., Lancaster, Ohio, has named Donald E. Matthews plant manager of the corporation's Winchester, Ind., glass-container factory. Mr. Matthews succeeds James W. Sharpe, resigned. Phillip Romig is assistant plant manager at Winchester.

Walter F. Friedman has been appointed as manager of sales engineering for General Gummmed Products, Inc., Richmond Hill, Long Island, N. Y. Mr. Friedman's principal activity at the General Gummmed Products will be the technical and sales development of "Wolco" Seal-Strap, a new glass-filament reinforced tape for use by the packaging industry.

The Paramount Paper Products Co., Omaha, Neb., producer of printed tape and labels, has appointed Bob Johnson as national sales representative.

Several changes in the sales organization of the Glass and Closure Div. of the Armstrong Cork Co., Lancaster, Pa., have been announced. Robert M. Ulmer has been named assistant manager of the Glass Container Dept. and will be located at the company's Dunkirk, Ind., plant. Byron T. Petry has been named assistant manager of the Chicago district office and will devote his time as a specialist in the food market. Other changes include the transfer of the following salesmen: R. L.



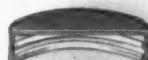
W. F.
Friedman

"No wonder my cream keeps so

Soft and Fresh!



HARD, SCRATCH-RESISTANT COATINGS. Bright, sparkling colors for instant sales appeal. Handsomely lacquered or lithographed to suit your requirements.



PATENTED THREAD DESIGN. Spins on frosty, forms a perfect-fitting seal, but won't "freeze" to container. Only MeritSEAL has this exclusive design.



SIMPLE, EFFICIENT CONSTRUCTION. Liner and thread are inserted into a sheet metal shell. The thread holds the liner in position, and the lower edge of the shell locks the thread in place.



RANGE OF SIZE, CHOICE OF COLORS AND LINER MATERIALS. 12 standard sizes ranging from 48 mm. to 100 mm. Special sizes can be ordered. Choice of various liners to suit your needs.

MeritSEAL -

Yes, it's MeritSEAL'd
...and that means
POSITIVE PROTECTION,
Miss!

The women who buy products capped with MeritSEAL love it—for its smooth, trim lines . . . smart, glistening colors . . . and its distinctive look and feel of luxury. MeritSEAL's safe, efficient seal keeps their cosmetics fresh and moist as new. Everyone who knows MeritSEAL agrees. Cosmetic manufacturers know how it compliments and enhances their product. Production men know it can be depended on for trouble-free performance on the production line. Behind-the-counter saleswomen praise the eye-catching displays—and the fast sales—they can make with products using MeritSEAL. See for yourself how really attractive and efficient MeritSEAL is. We'll be glad to send full information and samples. Simply state your color preference and sizes needed for your product.

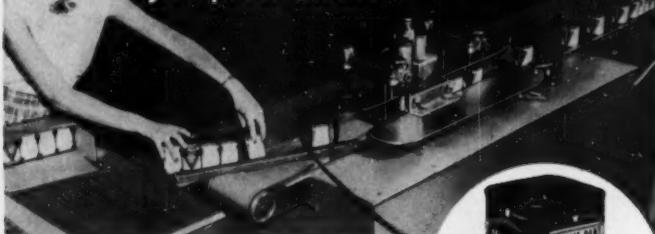
**CROWN CORK
SPECIALTY CORP.**

Division of Crown Cork & Seal Company



Main Office: St. Louis, Mo. • Chicago: 401 W. Ontario Street
New York: 60 East Forty-Second Street • Western Representative: Western Crown Cork & Seal Corporation . . . San Francisco . . . Los Angeles

How much can your company save ... by printing packages as you pack them?



This is the Gotscho MARKOCODER—the fully automatic packaging-line printing machine that enables you to use a common package for **dozens** of different products. The MARKOCODER prints name, number, other product identification on one or more blank panels of partially-printed containers . . . cartons, boxes, cans, canisters, jars, etc. . . as part of the packaging operation. It saves thousands of dollars by slashing package inventories . . . preventing downtime on the line . . . cutting losses from package obsolescence . . . simplifying inventory control . . . reducing labor costs. Find out how much it can save your company—write for descriptive brochure today.

ADOLPH GOTTSCHO, INC., Hillside 5, N. J.



Gottschos

Plants and people

Wilbur to Milwaukee; Marvin L. Humphries to San Antonio; Thomas H. Heaton to New York; C. V. Hoar to Pittsburgh.

Russell Nadeau has been named vice president and general manager of Rogers Plastic Corp., West Warren, Mass., manufacturer of plastic products. Robert Campbell has been named vice president and general manager of the Canadian plant at Rawdon, Quebec.

G. Findley Griffiths has been appointed vice president of sales of the Acme Steel Co., Chicago. Since joining Acme in 1950, Mr. Griffiths has served as assistant to the executive vice president and assistant to the president in charge of distribution.



G. F. Griffiths

The Crown Can Co., Philadelphia, has appointed John T. Anderson as Orlando plant manager, succeeding William A. Royal, who has resigned.

Ceragraphic, Inc., Newark, N. J., and Machines Dubuit of Paris, France, have been collaborating on the development of new silk-screen printing machinery especially adapted to the requirements of the American market. Ceragraphic will be sole distributor in this country.

M. C. Badger has been appointed sales manager for Fleishhacker Paper Box Co., San Francisco. Mr. Badger, who was formerly with Container Corp. of America, has had 17 years' experience in the paperboard industry.

The Shelton Mfg. Co., Inc., Newark, N. J., has appointed George W. deSmet, manufacturers' agent, and J. C. Hankey, packaging and paper specialties, 185 Devonshire St., Boston 10, Mass., as the firm's New England representatives.

The Chase Bag Co., Chicago, has opened a new sales office at 6009 W. Broad St., Richmond, Va. J. A. White will supervise sales in the Virginia-Carolina area.

Chippewa Paper Products Co., Inc., Chicago, has completed the construction of a new Eastern plant at South Hackensack, N. J., which is now in full operation. The new structure will speed production (This article continued on page 173)

REDCORE

There is no better closure method than gummed tape. There is no better gummed tape than REDCORE.

Rexford PAPER COMPANY
MILWAUKEE, WISCONSIN

Branch offices at
CHICAGO, ILL. COLUMBUS, OHIO
PHILADELPHIA, PA. ST. LOUIS, MO. ATLANTA, GA.

IS YOUR CUTTING



● Why scrape by with slow, laborious cutting methods that "bleed" your profits? Whisk through production and trim your costs with cutting that gives uniform "split-hair" accuracy. How? With a Beck Sheeter. It cuts anything from rolls, any quantity, any size, any time. Other advantages? Plenty—just ask . . .

CHARLES BECK MACHINE CORPORATION
406 N. 13th Street **BECK** Philadelphia 8, Pa.

Handy Dispenser for Scouring Powder with Sales Appeal to Nationally Famous Cleaners



Beautifully Molded Powder Bases and Round Cases add Sales Appeal to Cosmetics

MACK custom-molded components

Handsome styled Mack Molding Display by Mack features Stock Space in Hidden Drawers



DESIGN M MOLDING
MOLD MAKING

INCLUDING
precision
molded parts
FROM 3 COMPLETE PLANTS

Specify your individual evidence for sympathetic molding requirements. One of the original plastic molders, Mack experience dates back over three decades to the beginning of the industry. From design to final inspection, Mack Molding methods are keyed to meet industry's varied needs. Complete service—from blueprint to finish—features deliveries to meet assembly line schedules. Inquiries will receive prompt attention; address Mack Molding Company, Inc., Wayne, New Jersey.

Mack

**MOLDED
EXCELLENCE**

OVER 30 YEARS
OF MOLDING SERVICE
TO INDUSTRY



want to know the...

Power
of a superior, personalized
PRINTED
wrapping
tissue?

WRITE

 **GREEN BAY** tissue mills GREEN BAY, WISCONSIN

►HAND JAR AND BOTTLE FILLER

For the manufacturer
who needs fast,
accurate, spill-proof
hand fillings. Flow of
liquid or cream
controlled by
simple, hand-
operated valve.

- Pint, quart, half-gallon, gallon sizes (metal stands at extra cost)
- Available in tin, monel metal or stainless steel
- Easy operation
- Moderately priced



Glass
containers
since 1849

HAGERTY
BROS. & CO.

Division of J. Rabinowitz & Sons, Inc.
2 Hanson Place, Brooklyn 17, N.Y.

- 1 SELECT the items you want
- 2 CIRCLE the corresponding numbers on the post card
- 3 FILL IN the information requested
- 4 MAIL — no postage required

HELPFUL LITERATURE FREE

There is valuable data — worth dollars and cents to you — in the literature and samples described below.

EQUIPMENT • SUPPLIES • SERVICES

BOX-MAKING EQUIPMENT. Bulletin describes two machines, a new improved single corner cutter and a new scoring machine, of interest to all box makers. M. D. Knowlton Co. (K-231)

"CEL-O-SEAL" BANDS. Booklet describes tamper-proof cellulose closures for bottles, which are colorful and which allow space for quick price marking on top. E. I. du Pont de Nemours & Co., Inc. (K-232)

CONVEYOR UNITS. Booklet contains illustrations and descriptions of eleven standardized conveyor units for packaged commodities, including those designed to elevate, lower and convey horizontally by gravity or power. Standard Conveyor Co. (K-233)

CAN PALLETIZING EQUIPMENT. Bulletin contains data on a device which palletizes "bright" cans at rates up to 300 per minute and de-palletizes at up to 1,000 per minute. Standard-Knapp, Div. of Emethart Mfg. Co. (K-254)

FILLING MACHINE. Bulletin on a new "Tripweigh" for automatically feeding and weighing of products in units from 2 ounces through 1 pound and semi-automatically filling them into bags, boxes and cans. The Woodman Co. (K-255)

DRY AIR PUMP. Bulletin tells about the features of the Dexter-Conde "Dri-Air Pump" for delivering clean, dry air for pressure applications, or for creating vacuum pressures. Dexter Folder Co. (K-256)

MILITARY PACKAGING HANDBOOK. Booklet explains the meaning of various classification terms used in military packaging specifications. Diagrams show proper methods for constructing water-proof case liners and for performing pressure sensitive bags or pouches. The Cromwell Paper Co. (K-257)

VEGETABLE PARCHMENT PAPER. Informative booklet gives background information about this high-wet-strength and grease-resistant packaging material. Covers method of manufacture, physical properties, and recommended applications in the packaging of foods, drugs, and other products. Paterson Parchment Paper Co. (K-258)

V. P. I. ENVELOPES FOR METALS. Sample and descriptive bulletin on "DryVapor Pack-Velopes," protective envelopes for steel and aluminum pieces, which prevent rust and corrosion without use of greases and goos. Berlin & Jones Co. (K-259)

GUIDE TO CAST PLASTIC FILMS. Physical and chemical properties of six basic types of "Vinylite" cast plastic films are outlined in a useful handbook. Bakelite Co., Div. Union Carbide & Carbon Corp. (K-260)

LABELING ROUND CONTAINERS. Technical service bulletin illustrates all current machines for automatic or semi-automatic labeling of glass jars, bottles, tin cans, and fiber-bodied cans. Lists Paisley labeling adhesives and labeling methods. Paisley Products, Inc. (K-261)

SEALER FOR MOISTURE BARRIER MATERIALS. Description of a power driven hand sealer for use on cotton or scrimback, polyethylene and vinyl laminates, and similar heat-sealable materials at speeds to 200 linear inches per minute. Doughboy Industries, Inc. (K-262)

SHEETERS. Complete information on the full line of Beck automatic roll sheet cutters and their attachments is given in this catalog. Charles Beck Machine Corp. (K-263)

DISPOSABLE PLATE PROCESSING TOWELS. Bulletin explains the use of Kimberly-Clark "Litho Wipes" to replace rags for wiping in the preparation of lithographic plates. Kimberly-Clark Corp. (K-264)

VINYL ACETATE POLYMERS AND COPOLYMERS. Information about emulsions and solutions which can be used to make heat-sealing, gloss, and protective coatings, binders, sizes, and adhesives for paper, foil, plastic sheeting and other difficult surfaces. National Starch Products, Inc. (K-265)

ROTARY VACUUM FILLERS. Illustrations, descriptions and specifications of six basic models, with fourteen adaptations, of rotary vacuum bottle-filling machines are contained in a bulletin issued by U. S. Bottlers Machinery Co. (K-266)

MERCHANDISING WITH CORRUGATED. A "how to" booklet gives details on the use of corrugated boxes for merchandising products and as selling containers. The Hinde & Dauch Paper Co. (K-267)

BUNDLING WITH "SCOTCH" BRAND TAPES. Application photos show how various grades of "Scotch" brand pressure-sensitive tapes can be used for combining packages into "deals," holding palletized loads, bundling steel pipe and holding protective coverings. Minnesota Mining & Mfg. Co. (K-268)

PACKAGE IMPRINTING. Brochure showing how various manufacturers imprint supplementary package information automatically with the Gottscho "Marko-coder." Adolph Gottscho, Inc. (K-269)

FLUORESCENT SILK SCREEN COLOR CHART. Chart of "Velva-Glo" fluorescent silk screen color swatches. Instruction sheet gives data on their uses, including recommended silks and squeegees, square-foot coverage, drying time, etc. Radiant Color Co. (K-270)

AUTOMATIC CAPPING EQUIPMENT. Bulletin gives descriptive information and specifications of automatic capping equipment which sorts, sets, and applies almost every known type of closure. Consolidated Packaging Machinery Corp. (K-271)

Fill out and mail this card now

MODERN PACKAGING

Manufacturers' Literature Service

I am interested in the following items:

K-251 K-252 K-253 K-254 K-255 K-256 K-257 K-258 K-259 K-260 K-261
 K-262 K-263 K-264 K-265 K-266 K-267 K-268 K-269 K-270 K-271 K-272
 K-273 K-274 K-275 I-276 K-277 K-278 K-279 K-280 K-281 K-282 K-283
 K-284 K-285 K-286 K-287 K-288 K-289 K-290 K-291 K-292 K-293 K-294

If you do not now subscribe to MODERN PACKAGING, but wish to receive the next 12 issues (U.S.A. & Canada, \$4, all other countries, \$8), just check here

NAME **POSITION**
 (Please Print Plainly)

COMPANY

STREET **CITY** **STATE**

(Not Valid After February 15, 1953)

FREE HELPFUL LITERATURE

There is valuable data—worth dollars and cents to you—in the literature and samples described below.

- 1 SELECT the items you want
- 2 CIRCLE the corresponding numbers on the post card
- 3 FILL IN the information requested
- 4 MAIL—no postage required

EQUIPMENT • SUPPLIES • SERVICES

CARTONER. Described are the features, advantages, operation sequence, and specifications of the Jones CMV constant motion vertical cartoner. Floor plans included. R. A. Jones & Co., Inc. (K-272)

PRODUCE PACKAGING DATA. Basic information on pre-packaging fruits and vegetables. Explains selection of package form, package material and package design. Milprint, Inc. (K-273)

LIQUID FILLING MACHINES. Folder describes several semi and fully automatic vacuum and gravity fillers for all types of liquids. MRM Company, Inc. (K-274)

PATTERN ENGRAVINGS FOR RUBBER PRINTING PLATES. Folder explains the superiority of extra-depth pattern engraving in making rubber printing plates. Compares examples of printing from rubber plates made with zinc mold patterns and with extra-depth mold patterns. Moustype (K-275)

MANUALLY OPERATED BAG SEALER. Bulletin describes an electrically heated, manually operated sealer for polyethylene or plastic film bags up to 8-in. wide. Mercury Heat Sealing Equipment Co. (K-276)

DRY PRODUCT PACKAGER. Question and answer bulletin points out advantages and features of the new combination automatic "Whiz-Packer" and endless belt conveyor for filling flat bottom containers with dry products. Frazier & Son. (K-277)

FILLING MACHINE AND ATTACHMENTS. Described is the fully automatic, high-speed "Fillmaster" filling machine used for dry and semi-dry products. Included are details about various attachments. Stuyvesant Engineering Co. (K-278)

LABELING IDEAS. Brochure contains hundreds of suggestions on sizes and styles of labels for packaging and shipping. Ever Ready Label Corp. (K-279)

"PRINT-AD-STRING." Details on a tough, non-woven, cotton industrial tape which may be printed with brand name, slogan coding or footage indication. Chicago Printed String Co. (K-280)

PACKAGING MACHINERY. The complete line of Redington machines for automatically cartoning nearly every sort of product, for wrapping, forming trays, coding, counting, filling and banding is described in a brochure issued by F. B. Redington Co. (K-281)

CONTAINER COMPRESSION TESTING MACHINES. Bulletin gives details on several machines and their accessories for large volume production testing of containers and for exacting research laboratory programs. National Forge & Ordnance Co. (K-282)

POLYETHYLENE BAG MACHINE. Description of the size range, production and other features of the Roto Model PO-2 machine for making polyethylene bags from both tubing and sheeting. Roto Bag Machine Corp. (K-283)

CONTAINER LABELER. Bulletin describes three labelers for round cylindrical containers from 1½-in. to 7 ½-in. in diameter and up to 8-in. high. Chisholm-Ryder Co. (K-284)

MINIATURE PLASTIC HAT BOXES. Bulletin and price list on decorated 4-in. by 6-in. miniature acetate hat boxes with carrying cord handles. Weinman Brothers, Inc. (K-285)

CREASE WRAPPING MACHINE. Bulletin describes the "Strand" semi-automatic crease wrapping machine for neatly wrapping cakes, pies, cans and similar round objects in cellophane and other films. Charles E. Douglas & Co., Ltd. (K-286)

PAPER CONVERTING EQUIPMENT. Bulletin with brief descriptions of the following Dilt paper converting machines: waver, double comboser, plastic winder, "Contracuter," combination reel and unwinder. Dilt Machine Works, Div. of the Black-Clawson Co. (K-287)

TABLET COUNTER. Bulletin gives specifications, production schedule and description of the "PerfeKtum TabCount" for rapid, correct counting of tablets, capsules, pellets, etc., directly into containers. Popper & Sons, Inc. (K-288)

BOTTLE LABELING MACHINE. Folder explains the method of operation, features, and advantages of the "Novo-Tempo" labeler for applying body, breast, strip, neck and closure seal labels to bottles with crown cork seals, lever or swing closures. Alfred Hofmann & Co. (K-289)

POCKET ENVELOPE MACHINE. Description of a machine which operates from previously cut and printed sheets and produces seed bags, pay envelopes and bags for food, chemical and sundry industries. Hol-Bag, Inc. (K-290)

MARKING MACHINE. Details on the Markem Model 19 A for marking plastics, wooden articles, and painted surfaces. Markem Machine Co. (K-291)

DESICCANT. Reprint from MODERN PACKAGING magazine explains new uses for "Desicite 25," a dehydrating agent which meets the needs for the packaging field for a stable desiccant that is odorless and tasteless. Filtral Corp. (K-292)

AUTOMATIC CASE IMPRINTER. Specification sheet shows how "Packomatic" imprinter imprints from one to eight lines on one or more sides of shipping cases. J. L. Ferguson Co. (K-293)

BAGS AND WRAPS. Portfolio of flexible package samples converted from all types of films and papers and featuring such graphic arts processes as rotogravure, anilox and letterpress. Oneida Paper Products, Inc. (K-294)

Fill out and mail this card now



BUSINESS REPLY CARD

First Class Permit No. 2636 (Sec. 34.9, P. L. & R.), New York, N. Y.

MODERN PACKAGING

575 Madison Avenue

NEW YORK 22, N. Y.





RADO PACKAGES

OPEN
AMAZING
NEW
SALES
POSSIBILITIES

RADO PACKAGES* are the sort of things Sales Managers and Marketing Directors dream of but rarely find—practical, radically new, low-cost packages that ideally lend themselves to all-out consumer promotion.

RADO PACKAGES are *all plastic*. They are made automatically and continuously from a wide range of thermoplastic materials, both clear and opaque. The packages are made and filled simultaneously and can be of regular or irregular shape.

Equally suitable for liquids or pastes, RADO PACKAGES can even be produced in the form of unique capless collapsible tubes which have self-sealing apertures.

If you feel your product could benefit from this new type of packaging that is novel, practical, low cost and wonderfully responsive to consumer promotion, write to the Main Office of Technopol Laboratories, or to the Packaging Service Station nearest you for additional facts.



*U.S.A. Patent No. 2,517,027, 2,530,400
British Patent No. 599174, 599183
Patented in 36 other countries. Other patents pending.

TECHNOPOL LABORATORIES LIMITED

Tel: London Wall 9452-9453 • 212 St. John Street, LONDON, E. C. 1, England • Cables, Teabear, London

Packaging Service Stations:

E. AFRICA

UNIVERSAL PLASTIC
PACKS (PTY.) LTD.
45/44, Mentleigh House,
Smith Street, DURBAN.

SWITZERLAND

GISIGER & CO.
Office: Claridenhof,
Dreikönigstrasse
31, ZÜRICH. Tel:
(01) 27.24.47/
25.00.80.
Factory: Obfelden.

ITALY

GISIGER & PATRIZI
S. p. A.
Piazza Santa Felicita 4
Firenze

GERMANY

VERPACKUNGS-
TECHNIK G.m.b.H.
Frankfurt/Main

FRANCE

(Algiers, Tunis, Morocco)
S. E. P. (Soc. d'Emballages
Plastiques)
Office: 17 Rue Notre-Dame-
des-Champs,
PARIS 6e. Telephone
ODEON 71-83.
Factory: 24 Avenue de la
République, CHATOU,
France. Tel: 274.

AUSTRIA

Tupla Gesellschaft, Vienna
IV, Wiedner Hauptstrasse 8
Telephone: A 34067

BELGIUM

(Holland, Luxemburg, Belgian Congo)
S. E. P. (Soc. d'Expansion des
Matières Plastiques)
Office: 41 Rue de la Vallée,
GAND.
Tel: 594.96.
Factory: 68-7 Rue de l'Agrafe,
BRUSSELS.
Tel: 22.19.32.

IRE

TECHNOPOL PACKAGING
SERVICES, 81/2 Augier
Street, DUBLIN. Tel. Dublin 53524



QUAD

4 VALVE FILLER

E **THRIFT**—Economy-wise production men choose Elgin Machines for their lower initial cost, minimum maintenance and operating expense.

E **VERSATILITY**—Widely utilized by large and small plants because of their quick, simple changeover to accommodate a broad range of products and container sizes.

E **DEPENDABILITY**—Long years of trouble-free, continuous production distinguish the Elgin equipment now serving leading packers in the food, paint, cosmetic, oil and various other industries.

IDEAL GLASS OR FOR TIN

Extensively used to fill mustard, peanut butter, relish, jams, jellies, mayonnaise, soups, creams, ointments, waxes, animal foods, horseradish, roofing cement and similar products.

ELGIN MANUFACTURING COMPANY • 200 BROOK STREET • ELGIN, ILLINOIS

Important message to all users
of pliable containers

DOUBLE-LOCK

"Zip-Tite Tie"

RE-USABLE

Finest
Instant Air-Tight
Closure



Food-Maker gives national endorsement
in premium test

Tested in six major markets—improved six times before being put on the market—these ties have no equal. Advertised in newspaper premium offer by one of America's largest food companies (name on request), "ZIP-TITE TIES" scored instant consumer success. Unprecedented demand for use with refrigerator-freezer-clothes—and-utility bags. Orders accepted for 1,000 or 1,000,000 and more. Imprints at lowest cost.

Write for One Dozen Free Samples and Price List

"ZIP-TITE TIES" sold through jobbers across nation. Write for free samples, price list and name of jobber nearest you.

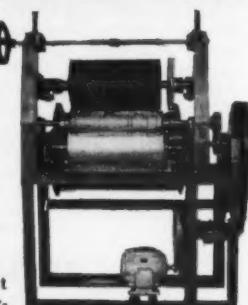
VISIBLE PACKAGE SALES CORP.
540 North Lake Shore Drive Chicago 11, Illinois

LEMBO SURFACE OR ROTOGRAVURE PRESS

BEST YET
IN A SMALL
INEXPENSIVE
PACKAGE
PRINTING
PRESS

... 6" TO 36"

Prints narrow webs at high speed by either surface method or rotogravure. Several units hooked up in series give you a compact multi-color press at amazingly low cost. Excellent for production printing or laboratory work.



Engineered and built by LEMBO... manufacturer of fine printing machinery for plastics, paper and textiles, up to 80" wide, 1 to 12 colors, surface and rotogravure.

LEMBO

MACHINE WORKS, Inc.

248 East 17th Street Paterson 4, N. J.



**SERVING INDUSTRY
... SERVING AMERICA**

You are always close to Continental Can with its 65 plants in the United States, Canada and Cuba, 17 field research laboratories and 63 sales offices.



THEY'VE NEVER SEEN A COW

but now they drink fresh whole milk

In lands where cows don't thrive, fresh whole milk has always been a scarce article. When obtainable at all, it's expensive because it's had to be shipped in by air, under refrigeration.

What's been needed is a way to take *whole milk*, just as it comes from the cow, *and can it so as to preserve the fresh milk quality and flavor for weeks or months without refrigeration.*

On the basis of the experience that Continental scientists had accumulated in milk processing, they were asked to assist in the operation of a pilot milk-canning plant at the spotless "milking parlor" of a customer. Drawing upon accumulated knowledge, these Continental scientists helped develop a method of canning whole milk that was a success from every standpoint. These results led to the construction of the first full-scale whole-milk canning plant. This plant already has passed its first year of successful operation.

This new canned milk which stays fresh for months at room temperatures is now being shipped to Alaska and South America, and to Army and Navy Installations overseas. Its success is another example of how Continental scientists—by solving problems of processing and packing—help food producers improve the diet of millions of people.

(This advertisement originally appeared in full-color in **TIME**, **BUSINESS WEEK** and **FORTUNE**.)

CONTINENTAL CAN COMPANY

CONTINENTAL CAN BUILDING

100 E. 42nd ST., NEW YORK 17, N. Y.



TIN CANS



FIBRE DRUMS



PAPER CONTAINERS



STEEL PAILS AND DRUMS



CAPS AND CORK



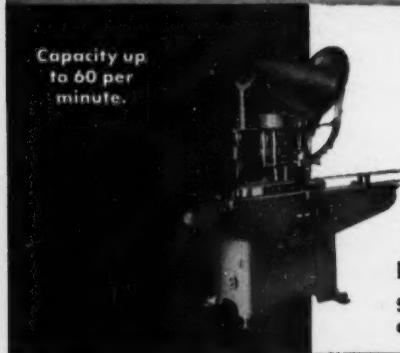
UTENSILS

RESINA CAPPERS

A MODEL FOR EVERY PURPOSE . . .

A SPEED FOR EVERY NEED!

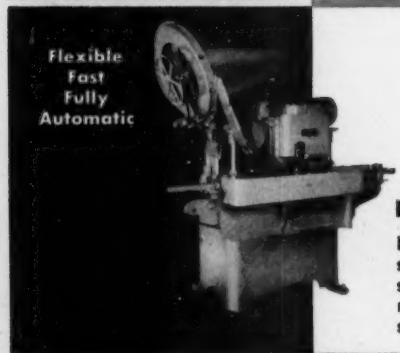
Capacity up
to 60 per
minute.



RESINA

Standard, single head,
automatic screw capper.

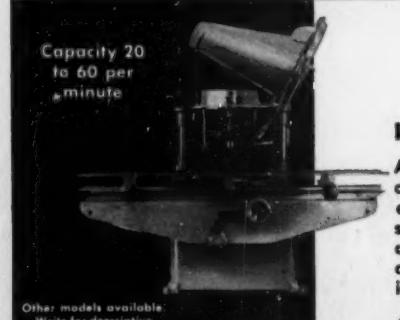
Flexible
Fast
Fully
Automatic



RESINA

High speed, straight line
screw capper. Rated for
speeds up to 300 per
minute depending on
size of container.

Capacity 20
to 60 per
minute



RESINA

Automatic innerseal ma-
chine for selecting and
applying standard inner-
seals to various types
and sizes of tin cans as
commonly used in the oil
industry.

Agents in principal cities through-
out the United States and Canada

RESINA AUTOMATIC MACHINERY CO., INC.
BROOKLYN 31, N. Y.

Other models available:
Write for descriptive
literature

Plants and people

(This article continued from page 173)
nental Can Co. of Canada, Ltd., Montreal, Que., replacing Harry A. Rapelye, who has retired; J. R. Wallace, district sales manager, Metal Div., Boston district sales office, replacing Bruce Petersen, who is now in the Central Metal Div.

Continental has purchased a 40-acre plant site in Omaha, Neb., and will start construction of a modern, one-story plant for the manufacture of metal containers.

The Mehl Mfg. Co., converter and flexible packaging manufacturer, has appointed Stan Houston as sales representative in Alabama, Florida, Georgia, Mississippi except Jackson, North Carolina, South Carolina and Tennessee except Memphis. Mr. Houston has had extensive experience in the packaging field.



S. Houston

Beryl Foyle, one of Britain's leading business women and joint managing director of Boxfoldia, Ltd., of Birmingham, England, is coming to the United States in January for a six-week speaking tour.

Several promotions have been made by Snyder Tool & Engineering Co. and its subsidiary, Arthur Colton Co., both of Detroit, Mich. Bruce M. Regan has been made manufacturing manager of all Snyder and Colton plants. George Derwich has been named plant superintendent of Plants No. 1 and 2. Robert J. Maxvill has succeeded Mr. Derwich as assistant plant superintendent.



B. M. Regan

The Arthur Colton Co., specialist in pharmaceutical and packaging machinery, has appointed the Warren Curry Co., 599 Plum St. N. W., Atlanta, Ga., as its representative. The Curry Company which has been handling stainless steel processing equipment for the pharmaceutical, food, cosmetic, beverage and textile industries, will now service all Arthur Colton Co. products.

Addition of six new managerial positions has been announced by the Avery Adhesive Label Corp., Monrovia, Calif. C. J. Lee has been selected as field sales manager to supervise the entire United States field operation from Chicago. R. W. Morris has been appointed specialty sales

Let in the LIGHT . . . SELL IT ON SIGHT . . . Pack it in HOWARD Seal BAGS!

Combining visibility, durability and saleability in one prize package, HOWARD SEAL polyethylene bags offer you the most in merchandising value.

"Job Engineered" to meet the specific requirements of your specific packaging needs, HOWARD SEAL bags are quality controlled during every step of the manufacturing, converting, and printing operations; — providing you with the perfect package in which to protect and promote your product.

Take a tip from thousands of other progressive packagers. Just "seal it and sell it" . . . in a HOWARD bag!



WRITE DEPT. 3-A for FREE SAMPLES & INFORMATION

HOWARD
Seal
PLASTICS

HOWARD PLASTICS
Pioneers in Polyethylene Packaging

- ★ Main Office: Council Bluffs, Iowa.
- ★ Plants at Council Bluffs, Iowa, and Tucson, Arizona.
- ★ In Canada: Transparent Paper Products Co. 5565 Côte St. Paul Rd., Montreal, Quebec.

HUSKY HOWARD SAYS:

"ASK US
TO ANALYZE
YOUR PACKAGING
PROBLEMS"



Investigate the many advantages offered by HOWARD SEAL polyethylene bags. The price of a package will bring you the services of a courteous consultant, who will show you how to produce more sales at a greater profit. Write or phone today!



Just another of the more unique glass containers produced by Braun in record time!

W. BRAUN CO.
CONTAINERS AND CLOSURES

312 N. CANAL STREET • CHICAGO 6
715 FIFTH AVENUE • NEW YORK 22

"If you would know
The POWER
of the LABEL... go
to Ever Ready"

Anonymous

LABELS FOR PACKAGING

ADVERTISING, POINT OF PURCHASE

SPEEDWAY ADDRESS LABELS

MERCHANDISING

SHIPPING, CAUTION

IN ROLLS, SINGLE

DIE-CUT, EMBOSSED

Ask for FREE IDEA BOOK

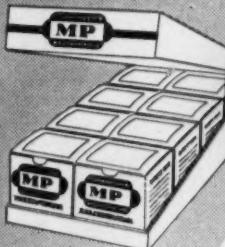
Ever Ready Label Corp.

363 CORTLANDT STREET • BELLEVILLE 9, NEW JERSEY

EVER READY
LABEL CORP.

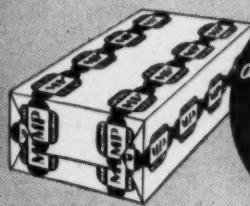
In a fast-changing world, with its countless new products and by-products, new problems of labeling present themselves. At Ever Ready we have ALL the answers... special papers, special adhesives, special formats. Heat-seal, Red-E-Stik, pressure-sensitive, spot-gummed, strip-gummed, carbonized. Cut single, padded, in rolls. Background of a million orders... over 50,000 customers. Sure, we can put LABEL-POWER to work for you, too!

Examine comparative costs



costly boxed
set-up time
inventory storage
packing time
no flexibility

Boxing
.....
VERSUS
Bundling



higher speed
automatic operation
uses materials
in roll form
adjustable

CHANGE-OVERS from boxing in printed display containers to machine bundling have resulted in savings up to 60%. Your costs might be reduced similarly. Can our packaging engineers discuss the dollars and cents of it with you?

Scandia
MANUFACTURING COMPANY

North Arlington,

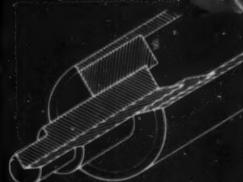
New Jersey

FOR BETTER ANILINE PRINTING

Use no-flex PLATE ROLLS



- CAN'T FLEX OR WHIP
- GROUND FINISH
INSURES ACCURACY
- FAST DELIVERY
- LOW IN COST



UNCONDITIONALLY
GUARANTEED
FOR SEVERE
SERVICE

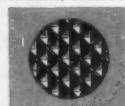
CUTAWAY SHOWS HOW EXCLUSIVE PROCESS FUSES ENTIRE JOINT INTO ONE SOLID MASS, INSURING EXTREME RIGIDITY. TUBE CONSTRUCTION REDUCES WEIGHT.

No-Flex — the new plate rolls that completely eliminate flexing and whipping — are your guarantee of a perfect impression. Special high speed lathes and equipment and improved methods of manufacture mean you get precision made rolls, quickly, and at lower cost. All No-Flex rolls are ground finished to your exact specifications and carefully inspected before shipment. The next time you need plate rolls, call Pamarco for faster service, lower cost and a better printing job.

EVENFLO ANILINE INKING ROLLS METER THE INK FOR BEST RESULTS

EVENFLO ENGRAVED ANILINE INKING ROLLERS — Eliminate ink waste, poor quality runs and rejects due to faulty inking and require no time-consuming adjustments. Evenflo Rollers meter the ink in the exact quantity needed, continuously and automatically. Proper inking — without operator attention — saves stock, ink, press down-time and operator fatigue. Using Evenflo Aniline Inking Rollers means high production quality — lower production costs.

Quotations on plate, impression
and special rolls supplied
promptly without obligations



ENLARGED VIEW
OF ENGRAVED
SURFACE SHOWS
SCREEN THAT AU-
TOMATICALLY
FEEDS CORRECT
AMOUNT OF INK.

PAMARCO

EVENFLO ENGRAVED ROLLERS
ROLLS FOR INDUSTRY
FAST, NATION-WIDE SERVICE

PAPER MACHINERY & RESEARCH, INC.
1014 OAK STREET • ROSELLE, NEW JERSEY

Plants and people

manager and will expand the company's line of Kum-Kleen pressure-sensitive labels. H. C. Kirby has been named sales manager, handling all consumer outlets on wholesale and retail levels. Factory service manager is Wayne G. Proper. Export manager is Ted Hallberg and J. Malcolm Dunn is the new merchandising manager.

Morningstar, Nicol, Inc., Chicago, distributor and processor of adhesives, has acquired the Jersey City factory and three departments of Innis, Speiden & Co., Jersey City, N. J. The departments include the natural gums and absorption base departments, and the wax department. Morningstar has arranged for the transfer of the wax department to Frank B. Ross Co., Inc., Jersey City. Edward O'Grady is manager of the new departments.



E. O'Grady

Berger-Amour, Chicago, point-of-sale display firm, has expanded its display services by establishing representatives on the East and West coasts. They are the Robert L. Rogers Co. in Seattle, Portland and San Francisco; and Lawson & Lawson, Inc., in New York.

Glen E. Carter, well known in the foil and converting trade, has rejoined the Reynolds Metals Co., Louisville, Ky., after a leave of absence with the National Production Authority. Mr. Carter replaces David Lewis as manager of Reynolds' paper and printing market. Mr. Lewis has been assigned another executive position.



G. E. Carter

Reynolds has increased the capacity of its plant at Longview, Wash., from 60 to 100 million pounds of pig aluminum per year. Reynolds also is now building the Robert P. Patterson Reduction Plant near Arkadelphia, Ark., with a capacity of 110 million pounds yearly and a plant near Corpus Christi, Tex., with an output of 730 million pounds yearly.

Rheem Mfg. Co., New York, producer of steel shipping containers, has announced that a new plant for the production of Rheemcote multicolored lithographed drums is now in full operation in Linden,

LABELS

SEALS

TAGS

Cameo Die & Label Co. is one of the world's foremost producers of labels, tags and seals in every form . . .

multi-color • paper or foil • die cut
embossed or printed • pressure sensitive
heat seal • stock labels • specialty seals
We make our own dies and engravings—do our own embossing, stamping printing and finishing
all of which guarantee your complete satisfaction.

*"A Cameo Label
Tells, Sells"*

\$ PROFIT MINDED?

You'll fill faster and at lower cost
with this automatic

FILLMASTER VIBRATORY FILLER

For dry & semi-dry products

STUYVESANT ENGINEERING COMPANY

107 STUYVESANT AVENUE

LYNDHURST, NEW JERSEY



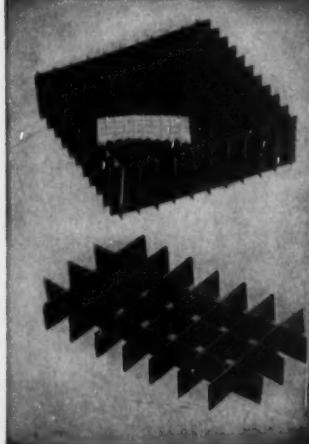
PROTECT WITH PARTITIONS

plain - die cut
made to your specification
fast delivery

pharmaceutical
candy • heart box inserts
collapsible tube • toy
and other trades
fast delivery

Let us serve your packaging problems.

RAPID
CUTTING CO., INC.
169-173 Franklin Avenue
Brooklyn 5, New York
Phone: ULster 5-1400-01-02



Plants and people

N. J. The firm's Bayonne, N. J., plant has been closed and all employees and equipment transferred to Linden.

A new packing and materials handling division has been established by American Can Co., New York, to consolidate the materials-handling, packing and shipping functions of the general manufacturing department. S. S. Nicholson has been named supervisor of the new division.

Gordon D. Zuck, president, has announced the organization of Vulcan Steel



G. D. Zuck

Container Co. for the manufacture of steel pails in sizes from 1 to 12 gal. and the establishment of a new plant in Birmingham, Ala. Mr. Zuck has served on the Steel Shipping Container Industry Advisory Committee of N.P.A. and has been active in national associations devoted to the development of container specifications.

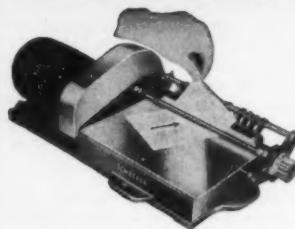
The Berles Carton Co., Inc., Paterson, N. J., manufacturer of paperboard cartons, has announced the construction of a new steel warehouse adjacent to the company's present plant. The new structure is part of an expansion program launched by Berles and its associate company, the Morris Paper Board Co.

Bivans Manufacturing, Los Angeles, designer and manufacturer of carton handling machinery, has incorporated and changed its name to Bivans Corp. Management and ownership remain the same. The firm has also announced the addition of 2,000 sq. ft. of production area and new offices to the plant located at 2431 Dallas St., Los Angeles 31.

Edward E. Ames, retired chairman of the board, director, vice president and director of sales of the General Box Co., Des Plaines, Ill., died on Sept. 28th at the age of 71. Mr. Ames was well known in the wooden shipping-container industry which he entered in 1907. Mr. Ames became interested in the formation of the General Box Co. in 1922 and from the founding of the company in that year served as vice president and director of sales until his retirement in 1946.

D. F. Hahn, vice president and production manager, and a director of General Box Co., Des Plaines, Ill., died suddenly of a heart attack on Sept. 23rd.

Schaefer LABELERS

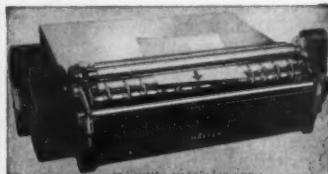


APPLY GLUE TO LABELS FOR BOXES-BOTTLES-CANS PARCEL POST PACKAGES

SAVE 35% LABOR. Speedy machine-gluing instead of slow brush-daubing. Round, square and die-cut labels glued. No adjustment except for glue coating. Ideal for short runs and production.



SCHAEFER EDGE GLUER-CEMENTER coats edges of paper, cloth, leather and cardboard with glue or latex. 3", 5", and 11" wide rollers.



SCHAEFER GLUER-CEMENTER. Heavy-duty construction. Sizes 16" to 52" wide, for coating cardboard, leather, cork, masonite, foam rubber, fibro, leatherette, canvas & paper.

**Schaefer
MACHINE CO.**
55 CARBON ST.
BRIDGEPORT 5, CONN.

PHONES: New York City—LE-2-3010
Bridgeport 68-2250
Boston—Arlington 3-8096

Agents in principal cities

MODERN PACKAGING

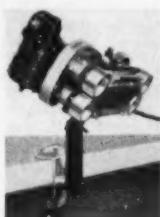


MILITARY PACKAGING of generating equipment is speeded by DOUGHBOY Power Hand Sealers at the Minneapolis plant of D. W. Onan & Co.

NEW PORTABLE HEAT SEALER ELIMINATES "SKIPPING"

Here's an inexpensive, lightweight heat sealer that gives you all the advantages of heavy installations. It's the new DOUGHBOY Power Hand Sealer, a motor-driven rotary sealer that guarantees a continuous dwell for the entire length of the seal. Adequate speed (200 inches per minute) enables operator to seal every inch uniformly, with none of the lapses encountered with manually controlled devices.

Three models handle all types of heat-seal materials. Further details sent on request to



Mounting bracket converts sealer into a bench-type unit.

DOUGHBOY INDUSTRIES, INC.
Mechanical Division • New Richmond, Wisconsin



Middlesex makes it!

Diameters from $\frac{1}{4}$ "—and less
—to 18" and larger . . .

- CONTAINERS Metal and paper closures
- SPECIALTIES Condenser tubes; Socket liners; Reels; Spools . . . and many more

WRITE FOR SAMPLES AND PRICES

PRESSED END CLOSURES

Middlesex automatic machine production has shaved costs on $\frac{3}{8}$ " x $2\frac{1}{2}$ " pressed end closures to a fraction of a cent. Lowest in cost, colorful and attractive, useful in a wide variety of applications. Why not investigate them now?



MIDDLESEX PAPER TUBE CO., Inc.
345 CHELMSFORD ST., LOWELL, MASS.

**HIGH SPEED!
ACCURATE!
LOW COST!**

DRY PRODUCT PACKAGING

WHIZ-PACKER



PACKAGE
FILLING MACHINE
BENCH MODEL

Products like powders, nuts, crystals, candy, seeds, teas, coffee, spices, frozen foods, soup mixes, peanuts, beans, popcorn, etc., require accurate net weighing—and high speed filling.

Whether you use WHIZ-PACKER BENCH OR FLOOR MODELS, you can fill any size—any type package at a speed up to 104 a minute—with close tolerance accuracy.

**WHIZ-PACKER, NOT THE OPERATOR
SETS THE PACE**

WHIZ-PACKER FLOOR MODEL



Send product sample and package
for complete details and prices.

FRAZIER & SON
338-01 Cortlandt St., Belleville 9, N. J.

EASTERN STATES: AMSCO PACKAGING MACHINERY, INC., LONG ISLAND CITY, N.Y.
WESTERN STATES: AMSCO PACKAGING MACHINERY, INC., OAKLAND, CALIFORNIA
MIDWESTERN & SOUTHERN STATES: MIDDLE WRAPPING AND SEALING MACHINE CO., CHICAGO
CANADIAN EXPORT: MIDDLE WRAPPING AND SEALING MACHINE CO., LTD., TORONTO, CANADA

For your information

The Packaging Machinery Mfrs. Institute, at its recent 20th annual meeting in Hot Springs, Va., elected the following officers for the coming year: president, **Edwin H. Schmitz**, Standard-Knapp, Div. of Emhart Mfg. Co.; first vice president, **S. Chester Markley**, Comas Machine Co.; second vice president, **Mrs. Helen Horix Fairbanks**, Horix Mfg. Co.; new directors, **Robert T. Foreman** of R. A. Jones & Co., **Tom Miller** of Package Machinery Co., **E. A. Oliver** of Economic Machinery Co. and **John B. Wilson** of Wright Machinery Co. **Roger L. Putnam**, administrator of the Economic Stabilization Agency and a charter member of the institute, was a featured speaker. Other speakers included **Boyd Redner** of the Battle Creek Bread Wrapping Machine Co., **George von Hofe** of the New Jersey Machine Corp., and **Palmer J. Lathrop** of the Cameron Machine Co. Winner of the Wallace D. Kimball Memorial Trophy was **H. Lyle Greene** of the Peters Machinery Co. **John D. Sylvester** of Amoco Packaging Machinery, Inc., was awarded the **H. Kirke Becker Trophy**.

The 46th annual convention of the National Canners Assn., to be held Feb. 21-25, 1953, in Chicago, will stress problems of efficient management in the production of canned foods. The program, which is being prepared in cooperation with the Canning Machinery & Supplies Assn., will include nationally known speakers.

"The Canning Industry," a 36-page booklet describing the industry and its significance to the public, has recently been published by NCA. The booklet will be distributed to newspaper and magazine editors, radio and industrial research men and students. NCA is using the booklet initially in connection with the industry-wide observance of the 200th anniversary of the birth of Nicholas Appert, father of modern canning.

"A Guide for Selling to the United States Air Force," a handbook for those who want to do business with the Air Force, has been revised to cover all the latest changes in procurement procedures. Special attention is paid to small businesses and subcontracting. Copies may be had gratis from any Air Procurement District and Regional Office, or from the Commanding General, Air Materiel Command, Wright-Patterson Air Force Base, Ohio, attention Industrial Relations Section, MCPAXC-1.

"Broadening the Field of Industrial Engineering" was the theme of the 16th

Annual Time and Motion Study and Management Clinic sponsored by the Industrial Management Society, Nov. 5-7, Chicago. Clinic feature this year was a special group instruction on how to take industrial movies.

The Corrugated Containers Committee and the Chicago Section of the Technical Assn. of the Pulp & Paper Industry will hold a two-day conference in Milwaukee Nov. 20-21. First day will be devoted to papers and panel discussions, including a résumé of the industry survey on combining made by the Corrugated Containers Committee to be presented by **H. T. Scordas** of Union Bag & Paper Corp. Plant tours of Cornell Paper Products Co., Downing Box Co. and Gaylord Container Corp. will feature the second day. Send inquiries to **Burt Mendlin**, Secretary, TAPPI, Cornell Paperboard Products Co., 1514 E. Thomas Ave., Milwaukee, Wis.

Two sessions of the forthcoming Plant Maintenance Conference will be devoted exclusively to a discussion of paper mills and paper-products plants. The conference will take place at the Public Auditorium, Cleveland, Jan. 19-22, 1953, concurrently with the Plant Maintenance Show. There will be 64 meetings dealing with other aspects of plant maintenance. Problems will be treated so that executives from small, medium-sized and large plants may discuss those most directly involved in their own operations. Advance registration blanks may be had from **Clapp & Poliak, Inc.**, 341 Madison Ave., New York 17, N. Y.

A Danish Institute of Packaging has recently been established, with temporary headquarters at Julius Thomsensgade 3 B, Copenhagen V. Purpose of the Institute, according to **Svend Jensen**, chairman, is to further an interest in packaging and create a realization of the importance of packaging under conditions of self-service merchandising. One of the objects of the institute is to establish connections with foreign associations and organizations. Letters of inquiry are solicited.

"Plaxpak polyethylene bottles surround your product with convenience," according to a new eight-page brochure of **Plax Corp.**, which includes brief explanatory text and full photo illustrations of typical products packaged in the plastic "squeeze bottle" container. The catalogue covers the functional characteristics and design considerations of the polyethylene bottle,

with data on closures and accessories, printing and labeling techniques. The booklet is available from **Plax**, P. O. Box 1019, Hartford 1, Conn.

For the best annual report of the food container industry, **Continental Can Co.** received a bronze "Oscar of Industry" at the Annual Awards Banquet in the Grand Ballroom of the Hotel Statler, New York, Oct. 28, 1952. **Owens-Illinois Glass Co.** was runner-up, while **American Can Co.** placed third. The award is the result of the final ratings of an independent board of judges in the *Financial World Survey* of Annual Reports.

Plans are being made by the board of directors for the annual convention of **The Toilet Goods Assn.**, to be held in New York at the Waldorf-Astoria on May 12-14, 1953. The board voted to extend invitations, as in the past, to all known manufacturers of perfumes, cosmetics and other toilet preparations, whether mem-

What's doing

Nov. 9-12—**National Beer Wholesalers Assn. of America**, Region 2, Hotel Statler, Detroit, Mich.

Nov. 10-12—**Grocery Mfrs. of America**, Waldorf-Astoria Hotel, New York.

Nov. 13-15—**Western Growers Assn.**, Los Angeles, Calif.

Nov. 16-21—**Master Brewers Assn. of America**, New Orleans, La.

Nov. 17-19—**National Paint, Varnish & Lacquer Assn.**, Palmer House, Chicago, Ill.

Nov. 17-20—**American Bottlers of Carbonated Beverages**, Convention and International Exposition, Auditorium, Atlantic City, N. J.

Nov. 25—**Manufacturing Chemists Assn.**, Hotel Statler, New York.

Dec. 3-5—**A.M.A. Manufacturing Conference**, Hotel Statler, Cleveland.

Dec. 3-5—**National Assn. of Popcorn Mfrs.**, Congress, Chicago.

Dec. 4-5—**The Society of the Plastics Industry, Inc.**, Fourth SPI Film, Sheeting & Coated Fabrics Div. Conference, Commodore Hotel, New York.

Dec. 7-12—**National Assn. of Display Industries**, Hotel New Yorker, New York.



Tupper Seal, air and liquid-tight flexible covers fit, and are included in the sets of all Tupperware Canisters.



The Tupperware 50 oz. Canister is "standard equipped" with the Tupper Seal, air and liquid-tight flexible Pour All cover.



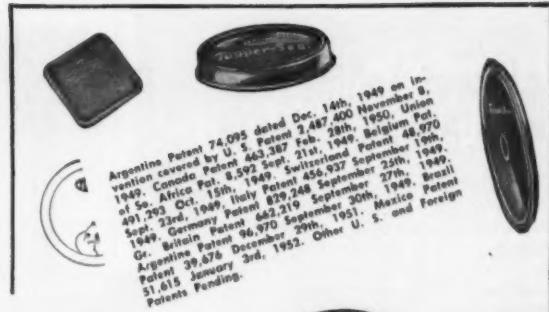
The Tupper Seal, air and liquid-tight flexible Pour All cover is used on every Tupperware 20 oz. Canister.



The Tupper Seal, air and liquid-tight, Pour All cover as a cover for 46 oz. cans, Tupperware Sauce Dishes and other containers of metal, glass or pottery. Foods easily dispensed without removing entire cover.



The Tupperware Wonder Bowls are usually fitted with Tupper Seal, air and liquid-tight covers.



Argentine Patent 74,095 dated Dec. 14th, 1949 on invention covered by U. S. Patent 2,487,400, 1949 on invention 491,203, Sept. 21st, 1949, Belgian Pat. 48,970 491,203, Oct. 1st, 1949, Switzerland Patent 456,932, September 25th, 1949, Argentine Patent 39,676, December 29th, 1951, Mexico Patent 51,615, January 3rd, 1952. Other U. S. and Foreign Patents Pending.

TUPPER! Seals

air and liquid-tight, flexible covers for Tupperware Tumblers, Canisters, Wonder Bowls, Cereal Bowls and many another container of glass, metal and pottery, the contents of which is desired to keep fresh and wholesome.

FORMAL NOTICE!

9th November, 1949

EXCLUSIVE!

U. S. Patent #2,487,400

The Tupper Corporation has attained a position of leadership in this industry by incurring great expense and expending painstaking effort in the development, design, manufacture and exploitation of its many world-known products.

The Tupper Corporation further has anticipated the inevitable attacks to which leadership is subject and has taken measures provided by law to preserve the creative rights to its products, methods and design by patent protection both in the United States and abroad.

Tupper Seals for Tupperware shown in this advertisement are just a few of the forms covered in this manner and are specifically covered by U.S. Patent #2,487,400.

Only the Tupper Corporation, by U.S. Patent #2,487,400 has the right to make, use and vend container closures in connection with any and all types of containers throughout the United States and its territories as covered by the claims of the Patent.

Tupper Corporation will protect, according to law, the exclusive rights above granted

TUPPER CORPORATION

TUPPER CORPORATION

Manufacturers of — CONSUMER, INDUSTRIAL, PACKAGING AND SCIENTIFIC PRODUCTS

Factories, Laboratories and Sales Offices: Farmington, Mass., Orlando, Fla., L'Epiphanie, P. Q.

Showrooms: 225 Fifth Ave., N.Y.C.

ADDRESS ALL COMMUNICATIONS TO: Department MP-11

COPYRIGHT TUPPER CORPORATION 1949



There's a Tupper Seal, air and liquid-tight flexible cover for Tupperware 2, 5, 8 and 12½ oz. Tumblers too, and these Tupper Seal, covers fit many other containers of metal, glass and crockery.

The Tupper Seal, air and liquid-tight flexible Pour Top cover, specially designed as a dispensing cover for specified diameters of containers holding foods such as syrup, salad dressings, catsup,



The cover of the Tupperware Bread Server which serves as a bread tray also is designed to give similar results as Tupper Seal, air and liquid-tight Flexible covers. Keeps contents fresh as no other such container.



When equipped with Tupper Seal, air and liquid-tight, flexible covers, Tupperware Cereal Bowls serve many another purpose.



The Tupper Seal, air and liquid-tight flexible cover made for Tupperware 8 oz. Tumblers also fits and is sold with all Tupperware Funnel as a base when funnels are used as storage containers.

Developed
specially
for printing
on

foil
acetate
pliofilm
polyethylene
cellophane
vinyl
saran

World's Finest Aniline Printing Press WOLVERINE HYDRO-PRINTER

MODEL
X-120



• The Wolverine Hydro-Printer Model X-120 is the ultimate in a hydraulic aniline press for multi-color printing of flat film (.001" to .010"), flat tubing and gusseted tubing. Its production speed and performance are unequalled. With it you get register which is far superior to that attained with single impression—stack type or straight in-line aniline presses.

The finest ink distribution system assures superb printing on everything from the smallest type to dense solid color areas. The X-120 won't stretch or wrinkle your materials and is suitable for treating (anchor coating) and printing of plastic film in a single operation.

FEATURES—Top feed roller. Overdrive structure, giving approximately 20' of drying space from last color to tension control. Running circumferential and side register control. Impression cylinders located in total hemispherical circle, driven by single bull gear assuring perfect wrap without any pull or stretch of material. Full flow circulating ink pumps. Mechanical back tension control. Efficient cooling rolls (built in singular unit). Sensitive automatic rewind unit. Complete single unit spiral bevel gear drive unit. Greater drying distance between colors. Most compact drying system. Continuous web control at any given speed for excellent color register work.

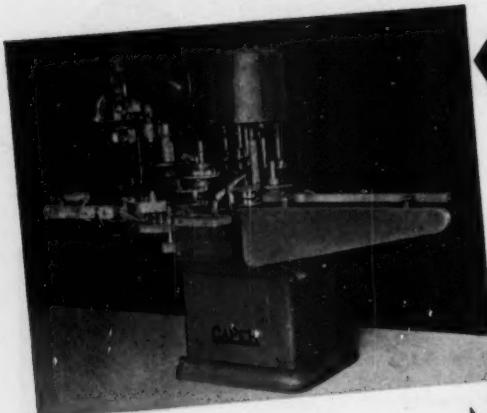
"BUILT IN DETROIT, MICHIGAN"
(The world's best known trademark)

BY AMERICAN WORKMEN

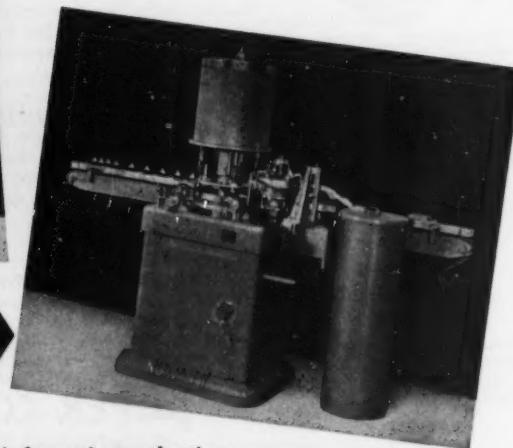
Up to 40" repeat. Widths from 26" to 80". Repeats up to 60" available. From 1 to 5 colors. Hydraulic instant on and off impression controls. Power impression. Free wheeling, constantly rotating impression cylinders stops. Dynamically and statically balanced rollers and cylinders. Self aligning ball bearings.

Wolverine
PAPER CONVERTING MACHINERY CORPORATION
3545 Seven Mile Rd. East • Detroit 34, Michigan

The TOP PRODUCTION TEAM for Tablet and Capsule Lines



CAPEM—Applies ALL TYPES of screw caps . . . Fully automatic . . . Capacities from 2000 to 10,000 an hour . . . Delivers a leak-proof seal . . . 1, 2, 4, 6 and 8-spindle models . . . More in use than any other make of capper.



KOTTONER—Follows basic design of CAPEM cappers . . . Protects sterility of wadding . . . Quickly changed over from one size container to another . . . Capacities from 40 to 100 containers per minute . . . The perfect team-mate for CAPEM on capsule and tablet lines.

Write for complete information and prices.

CONSOLIDATED PACKAGING MACHINERY CORP.

1400 West Avenue, Buffalo 13, N. Y.

For your information

bers of the association or not, but to limit supplier attendance to those suppliers who are associate members of T.G.A.

Benson Storfer, president of Parfums Corday, Inc., was elected to the T.G.A. board of directors to replace **Charles A. Mooney**. **Pierre Harang** of Houbigant Sales was named chairman of the convention program committee and **Lamson Scovill** of Scovill Mfg. Co. was appointed chairman of the convention committee for 1953.

An unusual booklet was recently sent out by the Fibre Fabric Group of the Tissue Assn., Inc., to a selected list of industrialists, Government officials and business executives. Cuttings of premium grade fibre fabrics form part of the cover. In an edition limited to 500 copies, the 24-page brochure can be compared to a mill tour in print, says **Ross A. Fife**, executive director of the Fibre Fabric Group.

Robert J. Painter has been elected executive secretary of the American Society for Testing Materials. **Raymond E. Hess** has been named associate executive secretary and editor in chief of the society. Both men have been members of ASTM for many years.

Some 78 manufacturers of materials-handling equipment attended the recent fall meeting of The Material Handling Institute, Inc., in Cleveland, Ohio, featuring a scientific management seminar conducted by **John D. Corrigan**, management and sales consultant. Final plans for the 1953 Material Handling Exposition to be held in Philadelphia under MHI sponsorship were discussed under the direction of **L. West Shea**, institute president.

The Lithographic Technical Foundation, 131 E. 39th St., New York 16, has put a 256-page volume on the press, to issue this month, entitled "The Chemistry of Lithography." Authored by **Dr. Paul Hartsuch**, formerly with LTF's own research lab, the book contains information essential to everyone who makes his living from offset lithography. Price is \$6 less discount to members; \$12 to non-members.

The Folding Paper Box Assn. of America's 1953 Carton Competition will close Dec. 31, 1952. The competition was designed to improve the quality of folding paper boxes produced by member companies through recognition of outstanding examples. Most of the entries will be on display at the annual meeting of the

An essential part of lower package-production costs!

Walton

CONTROLLED

HUMIDIFICATION

Walton Humidifiers increase accuracy
in package production
- FOUR WAYS!

1. ELIMINATING CURLED PAPERBOARD STOCK
2. PREVENTING CRACKED SCORING
3. ELIMINATES STRIPPING DEFECTS
4. IMPROVING PRINTING REGISTER



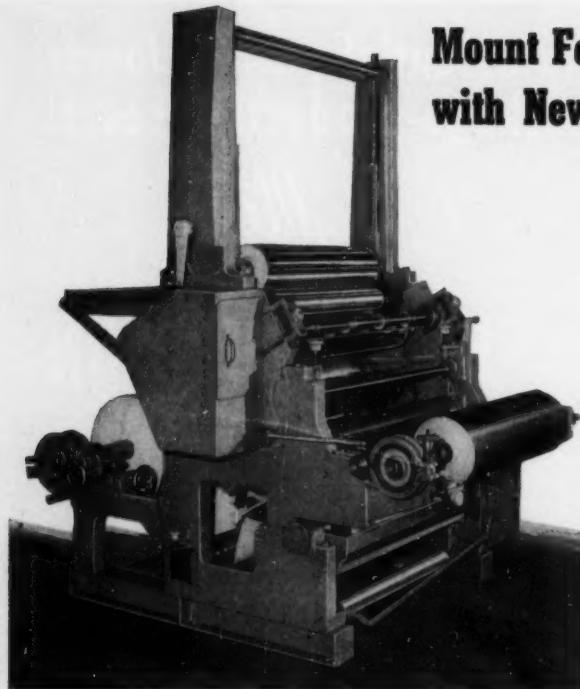
Combat the high cost of package production by using proven controlled humidification!

Scientifically controlling the moisture content of the air in your packaging and printing plants conditions paperboard and paper for efficient production. Economical Walton Humidifiers protect your stocks from the production-slowing effects of humidity variations ... reduce rejects and speed package manufacture. Get all the money-saving facts on a low cost Walton installation, now!

→ Send for the new booklet "HUMIDIFICATION FOR THE GRAPHIC ARTS AND PAPER CRAFTSMEN" — please address Dept. G-11.

WALTON LABORATORIES • INC
IRVINGTON 11, NEW JERSEY
CHICAGO BRANCH OFFICE: 30 NO. LA SALLE STREET

SPECIALISTS IN INDUSTRIAL, COMMERCIAL
AND RESIDENTIAL CONTROLLED HUMIDIFICATION



Mount Foil 1000 Feet Per Minute with New INTA-ROTO Machine

Scarcely larger than a desk, this new Inta-Roto Foil Mounter, type GHM (Glue or Hot Melt), laminates and slits in one operation at speeds up to 1000 feet per minute.

Amazingly compact, simple. Completely integrated dryer, no drying tunnels. Finished rolls ready for immediate use. All controls and vital parts within easy reach of operator. Fast thread-up, minimum downtime permits large, economical output of small rolls.

Comes as complete packaged unit, fully tested, guaranteed for immediate production.

Can be equipped for aqueous glue or wax laminating.

Ideal for foil wrapping materials which require no further printing (cigarettes, chewing gum, candies, frozen food, and bakery trays) and many other types of laminated packaging material, such as glassines and films. Write today for more information about this unique machine.

INTA-ROTO

Machine Company, Inc.

BYRD AIRPORT

RICHMOND 23, VA.



BAG PRODUCTS...



Container Aligning Feed Tables

Designed to accumulate and place in single or double line round cans, glass jars, bottles and tumblers from cases, trays, bulk carriers, retort crates and conveyors to feed fillers, labelers, casers or succeeding operations. One of the best pieces of equipment made to reduce hourly costs. Send for complete details and prices.



Chisholm-Ryder
COMPANY OF PENNSYLVANIA
HANOVER, PENNSYLVANIA
5233

Send Today for
Bulletin
No. 11-29



ANDERSON BROS. MFG. CO., ROCKFORD, ILLINOIS

Easy to Use..Low in Cost

Designed to handle bagged products with a minimum of effort at a maximum speed. Simple adjustments for height...tilting forward or backward enables operator to set machine at easiest position. Stainless steel trough with capacity of 200 bags. Adjustable to bag sizes. Blower keeps bag clean and free from foreign matter.

SOF-RAP

(PROTECTIVE CUSHION WRAP)



SO FLEXIBLE . . .

...Conforms to any shape



SO CUSHIONY SOFT

**... Absorbs transmission
of shock, vibration and
pressure damage**

SO LOW IN COST

... You can use it freely

Industry's newest 100% flexible wrap material gives your products the protection they need from jars and jolts at new low costs! SOF-RAP is a multi-wall kinkled cushion material that provides stretch and permits "slippage" . . . safeguarding against abrasion damage from friction and chafing. Soft-resilient inner cushion is strip-laminated to a tough, durable protective outer wrap that resists tears and punctures — perfect for exterior-interior packaging. Cushion sheet is also available without outer sheet backing for use where only interior protection is required.



NICHOLS
PAPER PRODUCTS COMPANY
GREEN BAY - WISCONSIN

For your information

association in Chicago Mar. 22-24, 1953, where winners will be announced.

David G. Delahunt, produce packaging division manager of Milprint, Inc., was guest speaker at the recent 10th annual convention of the Texas Citrus & Vegetable Growers & Shippers Assn.

Lloyd I. Volckening was elected chairman of the Drug, Chemical & Allied Trades Section of the New York Board of Trade at its 62nd annual meeting. Mr. Volckening is president of Ivers-Lee Co. Other new officials are: vice chairman, Stanley I. Mr. Volckening Clark, Sterling Drug, Inc.; treasurer, Hugh J. Crosson, McKesson & Robbins.

The 1953 edition of "Condensed Reference File of Bakelite and Vinylite Plastics and Resins" is 16 pages long and contains 110 photos showing applications and finished products. Brief, accurate descriptions of the various plastics made by the company (50 in number) are given. The brochure contains useful data on specific properties, industrial or commercial applications of the plastic formula and its ability to be formed in manufacturing processes. Copies are available to business firms from The Bakelite Co., Division of Union Carbide & Carbon Corp., 300 Madison Ave., New York 17. Just off the press is the impressive first edition of a new annual, "Graphis," (Pellegrini & Cudahy; \$12.50) put out by the editor of the periodical "Graphis," Walter Herdeg, and Charles Rosner, former editor of "Modern Publicity," which will be of great interest to many readers of MODERN PACKAGING. From more than 10,000 entries all over the globe the editors chose 753 of the best examples in five fields employing graphic expression, including packaging. The result is a handsome picture book of over 200 pages. The book is trilingual and 34 of its illustrations are in color.

Harry H. Price, Dallas, Tex., was appointed membership chairman of the Produce Prepackaging Assn. for 1953. Stuart A. Cohen, Ft. Pitt Tomato Co., was made general chairman of the 1953 Conference Committee and will have as his vice chairman W. F. Jacobi of Union Bag & Paper Co. The conference is scheduled for the week of Oct. 4, 1953, at the Chase Hotel, St. Louis.

Here's what they say:

The Sales Manager:

From the point of view of building sales volume, it pays us to have the finest packages and displays we can get. That's why I always call on Chaspec.



The Advertising Manager:

The attention-commanding point of sale aids we get from Chaspec tie in beautifully with our national advertising and create a really strong selling stimulus.

The Purchasing Agent:

I've always found Chaspec easy and pleasant to deal with. Their prices are most reasonable and their production facilities are tops.

The Store Manager:

Chaspec displays have the knack of selling the goods without clogging up valuable counter space. The merchandise they feature moves fast.

For unusual eye appeal
with unusual materials

The Chaspec Manufacturing Company
since 1920
Greenwich, Connecticut

three dimensional displays • moulded plaques
point of sale merchandisers • leather cases
distinguished packages • gift and re-use containers

CHASPEC

U. S. patents digest

This digest includes each month the more important patents of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps are not accepted.

Edited by H. A. Levey

Roll Film Container and Package, B. J. Rockefeller (to Union Carbide & Carbon Corp., a corporation of New York). U. S. 2,607,476, Aug. 19. A package for shipment of a roll of film comprising an elongated telescoping rectangular paperboard container having similar box-like sections constructed from flat sheet material and each provided with a bottom, side and end walls, and a roll of film mounted in the smaller and inner one of said sections, said film being wound on a core.

Bottle Closure, R. Sonnenberg (to Mid-West Bottle Cap Co., Belvidere, Ill.). U. S. 2,607,503, Aug. 19. The combination in a hood cap for dairy bottles of type having bead and cap seat, of a hood member comprising hood of thin ductile metal having a thickness of approximately 0.001 to 0.0025 in. capable of ready distortion by the bare fingers for removal from bottle, having a central depressed mouth-spanning portion and a skirt portion pleated to define folding lines for crimping cap around bead of bottle.

Bottle Closure, R. Sonnenberg (to Mid-West Bottle Cap Co., Belvidere, Ill.). U. S. 2,607,504, Aug. 19. A partially preformed hood-type bottle cap of laminated form comprising an outer layer of thin metal foil, outer surface of which is free from ink-adherent means, an inner layer of paper, an intermediate layer of plastic microcrystalline wax co-extensive with and adherent to inner and outer layers.

Process For Forming a Food Package, W. B. Kunz (to American Viscose Corp., Wilmington, Del.). U. S. 2,607,696, Aug. 19. The method of forming a food package by simultaneously forming a container and stuffing the container with edible material comprising moving hydrophilic cellulosic sheet material having edge portions in a longitudinal direction, and applying an aqueous solution of partially polymerized melamine-formaldehyde resin and lactic acid having a pH of 4.5 to 5.5 to an edge portion of the hydrophilic cellulosic sheet material while it is being moved in a longitudinal direction and the edge portions are being positioned in opposed relation.

Adhesive Tapes and Liners Having Low-Adhesion Coatings, J. O. Hendricks (to Minnesota Mining & Mfg. Co., St. Paul, Minn.). U. S. 2,607,711, Aug. 19. A non-fibrous cellulosic film having an exposed low-adhesion surface coating directly bonded thereto whose thickness does not exceed the order of a hundred-thousandth of an inch and which is formed of a copolymer of an ester of the class consisting of higher alkyl acrylates and methacrylates.

Apparatus For Setting Up Paper Receptacles, R. R. Richardson and D. W. Coy (to Chicago Carton Co., Chicago, Ill.). U. S. 2,608,139, Aug. 26. Apparatus for forming a receptacle from a blank which is cut and creased to provide a rectangular bottom panel, pairs of side and end-wall panels foldably connected to sides and ends of bottom panel, tongues foldably connected to and extended endwise from ends of panels, and cooperating slits and ears in tongues and end-wall panels for locking said side and end-wall panels in set-up position.

Shot-Shell Manufacture, W. L. Finlay (to Remington Arms Co., Inc., Bridgeport, Conn.). U. S. 2,608,140, Aug. 26. In the manufacture of bodies for shot shells for use in gun chambers of varying average diameter, the method which comprises winding and adhesively securing paper having a transverse elongation not substantially exceeding 6% in tubes having an outside diameter not materially less than 5% greater than maximum average chamber diameter.

Display Package For Neckties, W. L. Stensgaard (to W. L. Stensgaard & Associates, Inc.). U. S. 2,608,292, Aug. 26. A one-piece display package for neckties comprising, at least three necktie-display panels, length of said panels being more than one-quarter and substantially less than one-half the length of a necktie.

Container Package and Dispenser For Pressure-Sensitive Tape, A. P. Krueger and O. P. Erhardt (to Derby Sealers, Inc., Derby, Conn.). U. S. 2,608,295, Aug. 26. A dispensing container for tape comprising a casing having a body portion and cover, body portion being provided with a pair of openings spaced from each other and means temporarily sealing said openings against the entrance of air therethrough, a slide within the casing, slide comprising a resilient open ring-like member and having a projection adapted to extend through one of said openings and equipped with a projecting severing edge.

Labeling Machine, C. C. Hall, W. W. Hompe and J. A. Martell (to Smith, Kline & French Laboratories, Philadelphia, Pa., a corporation of Pennsylvania). U. S. 2,608,316, Aug. 26. In a labeling machine for printing labels and adhesively applying them to articles comprising a support for an article to be labeled, a magazine for a supply of labels remote from said support, a printing table between support and label magazine and a carriage with means to reciprocate carriage in a horizontal path.

Carton-Loading Machine, L. E. Arneson (to Morris Paper Mills, Chicago, Ill.). U. S. 2,608,330, Aug. 26. Container-filling apparatus comprising a carriage having a plurality of article-receiving compartments, means to advance continuously said carriage longitudinally, means for feeding a row of upstanding elongated articles parallel to the direction of advancement of carriage, means to deflect articles from upstanding position into compartments for advance with carriage.

Bag-Opening Machine With Upper and Lower Bag-Forming Units, E. Hoffman (to American Can Co., New York, N. Y.). U. S. 2,608,331, Aug. 26. In a bag-opening machine, the combination of a frame having a vertically disposed opening through which articles are passed horizontally for filling into bags held in open horizontal position.

Bag-Opening Machine With Adjustably Mounted Bracket-Supported Arms, R. K. Pottle (to American Can Co., New York, N. Y.). U. S. 2,608,332, Aug. 26. In a machine for opening bags and the like for holding them in position for filling, the combination of an open frame through which articles are passed during said filling, a plurality of brackets mounted on frame, said brackets comprising upper brackets vertically movable on frame to adapt machine to one dimension of a bag to be expanded.

Egg Carton, M. Burger (to Shellmar Products Corp., Chicago, Ill.). U. S. 2,608,338, Aug. 26. An egg carton adapted to be erected from an assembled but relatively flat knock-down condition to an erected condition, comprising front and rear walls, a bottom extending between and medially creased longitudinally of said walls to be disposed at its mid point above lower margins of walls in erected condition of carton, with cross partition members hinged to said respective walls adjacent the upper margin thereof.

Container, J. S. Donnell (to Florida Fibre Box Co., Sarasota, Fla.). U. S. 2,608,340, Aug. 26. A shipping container formed of comparatively stiff material and comprising a rectangular bottom, a pair of opposed double-thickness side walls of materially greater length than height connected to and extending upwards from side margins of bottom, consisting of spaced-apart substantially coextensive outer and inner parts joined together by inverted U-shaped folds.

Fibre Container With Improved Tearing Strip, G. E. Eckman (to American Can Co., New York, N. Y.). U. S. 2,608,341, Aug. 26. A container for frozen foods comprising a tubular body having a wall of fibrous material, a tongue formed in body wall, a removable tearing strip formed in outer part of body wall as a continuation of tongue and set off by a pair of spaced and parallel score lines cut in outer surface of body wall.

Filling Apparatus For Containers, W. Tubble and N. O. Loven (to Bridgeport Brass Co., Bridgeport, Conn.). U. S. 2,608,373, Aug. 26. A balance beam rotatable about a fulcrum with means for mounting a receptacle to be filled on beam to one side of fulcrum and counterbalancing means for beam.

Feed Roller For Packaging Machines, L. L. Salfisberg, H. G. Kopald and L. I. Volckening and C. M. Salfisberg (to Ivers-Lee, South Orange, N. J.). U. S. 2,608,405, Aug. 26. In a packaging



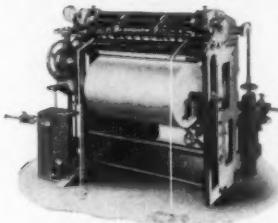
You're Invited TO A WEDDING

of speed and precision The joining of two names, Clark-Aiken and Goebel, long associated with advance design and quality craftsmanship on two continents, has produced production magic in a new line of slitters and rewinders. If your needs are exacting and production requirements are high, you'll find a happy and economical solution to your problems in this new line.

FEATURES:

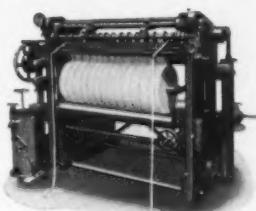
- ✓ This complete line affords a model to exactly fit your requirements for any slitting and rewinding operation.
- ✓ High speed production with working speeds up to 1650 feet per minute.
- ✓ Maximum precision at high speeds.
- ✓ Minimum downtime for loading and removal of rolls.
- ✓ CLARK-AIKEN GOEBEL cutting system assures dust-free cut and easy separation of rolls.
- ✓ Compact design with built-in motor requires minimum floor space.
- ✓ Rugged construction and use of roller bearings keeps maintenance to a minimum.
- ✓ Regulated hardness of rolls.

for slitting and rewinding paper, foils, film, fabric and plastic . . .



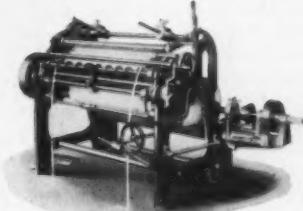
MODEL RAPID D

High production roll slitting and rewinding machine with floating rewinding shaft for production of narrow rolls. Working speed up to 1650 FPM. Working widths of 39 1/4" and 63 3/4".



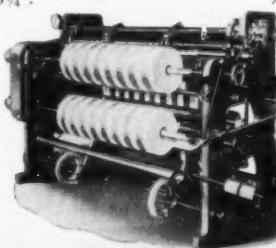
MODEL RAPID U

With supporting rolls for very hard winding especially suitable for rewinding with small diameter rewinding shaft. Working speed up to 1650 FPM. Working widths of 39 1/2", 49 1/2" and 63".



MODEL W R

Small roll slitting machine for the production of rolls with small core diameter. Working speed up to 350 FPM. Working widths of 39 1/2" and 49 1/2".



MODEL R W O

Precision roll slitting and rewinding machine with two rewinding shafts producing rolls of equal firmness. Working speeds up to 500 FPM. Working width 55".

CLARK - AIKEN GOEBEL
MANUFACTURED AND SOLD BY

Clark-Aiken
THE COMPLETE LINE

HIGH SPEED PRECISION
CUTTER-LAYBOY UNITS,
SLITTERS AND REWINDERS

THE CLARK-AIKEN COMPANY
LEE, MASSACHUSETTS

FOR HIGH SPEED PRECISION SHEETING THERE'S A COMPLETE LINE OF
CLARK-AIKEN CUTTER-LAYBOY UNITS.

LOOK, MISTER!

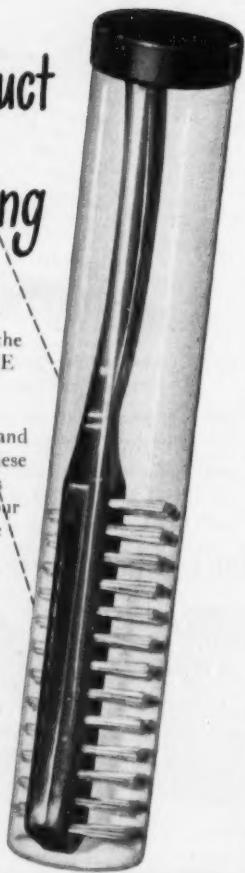
Your Product
is Showing

Seeing is believing in
merchandising today—and the
package that lets buyers SEE
your product is your best
"silent" salesman.

That's why Lusteroid vials and
tubes sell by the million. These
distinctive plastic containers
display as well as protect your
product during the complete
merchandising cycle.

Get the story on Lusteroid
and SEE for yourself how
much better you can do
with Lusteroid's light
weight, strength, color,
printability, and savings.
Sizes from $\frac{1}{4}$ " to $1\frac{1}{4}$ " in
diameter and lengths up
to 6". Cork, slip-on, and
screw-cap closures.

**Write for details
and samples.**



LUSTEROID Vials and Tubes

LUSTEROID Container Company, Inc.

10 West Parker Avenue, Maplewood, New Jersey

U. S. patents digest

machine, the combination of means for feeding a package strip that includes a plurality of layers of material sealed together at certain points to form a plurality of material-containing compartments spaced longitudinally on the strip, said means including a pair of opposed parallel rotatable rollers to receive between them said package strip, said package strip having material-containing compartments.

Weighing and Filling Machine, J. L. Ferguson and R. C. Talbot (to J. L. Ferguson Co., Joliet, Ill.). U. S. 2,608,372, Aug. 26. A machine for weighing and filling containers with particulated material or product, comprising a vertical supply pipe at top of machine, a horizontal feeder disk beneath supply pipe to receive material centrally therefrom, disk being relatively much larger in diameter than supply pipe, supply pipe being adjustable to and from disk to control supply of material thereto.

Tare-Setting Control Mechanism For Filling Containers, J. B. McMahon and F. B. Miller (to Republic Flow Meters Co., Chicago, Ill.). U. S. 2,608,371, Aug. 26. Control mechanism for filling apparatus including a scale comprising a device adapted to be connected to scale to produce a first force proportional to the weight on the scale, a balance mechanism, a pair of force-responsive units acting oppositely on the balance mechanism and connected to device to be responsive to the first force.

Apparatus For Securing a Closure Supporting Ring In The End Of a Receptacle Body, A. Merkle (to American Sealcone Corp., New York, N. Y.). U. S. 2,608,914, Sept. 2. In a spinning head for securing a closure supporting ring engaged in one end of a receptacle body, an axial support slidably mounted, a tubular member having an annular flange at its opposite ends and mounted on support to rotate on support and participate in the sliding movement of support.

Carton-Folding Mechanism, R. J. Hickin (to The Ohio Boxboard Co., Rittman, Ohio). U. S. 2,608,916, Sept. 2. In carton-folding mechanism for folding to erected form a flat paperboard carton blank having a bottom member, side and end-wall members defined from bottom members by folding scores and securing flaps defined from the side-wall members by folding scores and contiguous to but separated from end wall by cuts.

Folding Machine, C. Hess (to S & S Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y.). U. S. 2,608,917, Sept. 2. A folding machine for folding flat box blanks having predetermined fold lines into tubular form, said box blanks each having a pair of outer panels defined by fold lines, which panels when folded over toward each other against the blank body will meet at their edges to form a seam.

Apparatus For Inserting Closures In Containers, D. Kirk (to The Quaker Oats Co., Chicago, Ill.). U. S. 2,608,918, Sept. 2. In machine for producing containers having cup-like closures in separable interlocking relation with an opening in wall of container, a mandrel for holding a container feed mechanism for advancing closures toward mandrel and a transfer device for removing a closure from feed mechanism for inserting it in the container opening while container is located in mandrel.

Display Container, W. J. Tyrseck (to Robertson Paper Box Co., Inc., Montville, Conn.). U. S. 2,609,090, Sept. 2. A display container blank comprising a series of six aligned panels defined and separated from each other by parallel score lines for folding, the blank being adapted for folding continuously in one direction to form the container and comprising panels for forming a rectangular outer sleeve and a partition wall parallel to opposed side panels of sleeve, thus making two compartments.

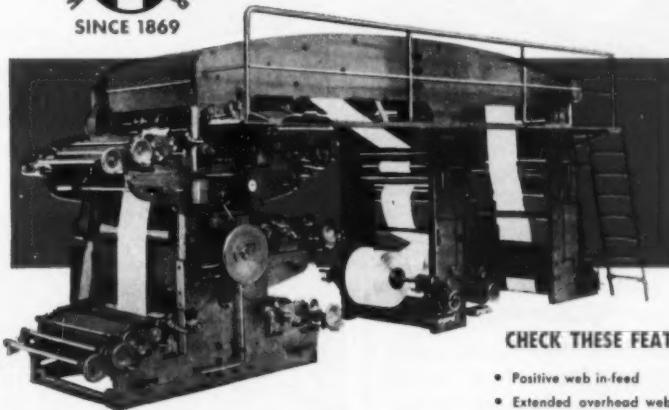
Magnetic Grapple Can-Loading Machine, L. J. Bulliet (to Odin Corp., Chicago, Ill.). U. S. 2,609,133, Sept. 2. A machine for handling metal articles at and between loading and unloading stations and comprising an article translating member with magnetic means connected with the translating member for causing article to adhere thereto.

Machine For Bagging Cereals Or Grain, E. Korber (to The Quaker Oats Co., Chicago, Ill.). U. S. 2,609,134, Sept. 2. A machine for filling bags with grain or the like comprising a chute for delivering a charge of grain, means to suspend a bag from chute with bag mouth surrounding delivery end of chute.

Container, D. I. McKenzie (to Moraine Box Co., Dayton, Ohio). U. S. 2,609,135, Sept. 2. A skeleton frame structure for placement in a container to support walls thereof and consisting of a bottom platform, a top platform and a pair of side walls extending between platforms unsecured relative to each other, top

H.H.H. JET IS YOUR BEST BUY!

The ANILINE
Multi-Color Printing Press
that spells ECONOMY
in capital letters!



- High-speed Multi-Color Aniline Printing Press. Massive design for vibrationless operation
- Prints perfectly on Cellophane; Glassine; Pliofilm; Polyethylene; Foil; all types of wrappers or light and heavy papers
- Combines fine printing with hairline color register; prints two to six colors
- Precision-built; long, satisfactory service, free from money-wasting mechanical defects
- Economical to operate. Built-in, exclusive features assure smooth, continuous service with unmatched low-cost maintenance record.

CHECK THESE FEATURES

- Positive web in-feed
- Extended overhead web guide
- Semi-automatic web splice
- Oversize cooling drum
- Longer drying distance between color
- Centralized lubrication
- Friction clutch universal brake



H. H. HEINRICH

COMPANY
111 - EIGHTH AVENUE, NEW YORK 11, N. Y.
CALL US... COLLECT!
WAtkins 4-6970-1-2

OK Send me information and prices on the
H H H JET

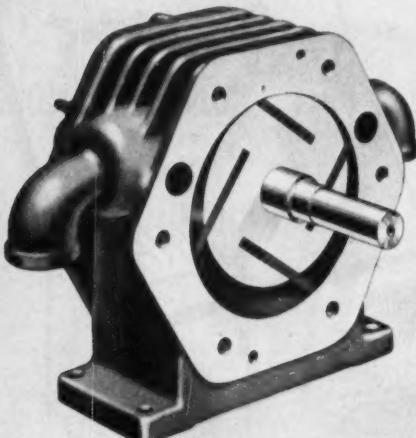
NAME: _____

ADDRESS: _____

COMPANY: _____

SIGNATURE: _____

Provides vacuum or air blast
free from oil . . . for
printing and packaging machinery



The Dexter-Conde DRI-AIR Pump

Here at last, is a pump that never needs to be lubricated. It won't freeze up because of somebody's oversight. It has no oil cups to be kept filled and turned down (or to be expensively forgotten). It won't accumulate greasy dirt; won't create a fire hazard, and it does away completely with oil streaking.

Its double-sealed grease-packed New Departure ball bearings operate under normal atmospheric pressure and are completely removed from the pump chamber. The pump is built with close tolerances and has no gaskets to leak or blow.

The carbon-graphite alloy vanes are stick-proof, warp-proof and chemically inert. They provide their own lubrication and become increasingly efficient as pump is used.

The Dexter-Conde DRI-AIR Pump makes a nice, clean installation. It is available in three sizes, one or a combination of which will solve your vacuum or air pressure problem.

Read these advantages again and, if your present pump equipment offers less, it will pay you to send for full information about the Dexter-Conde DRI-AIR Pump.

Dexter Folder Company
General Sales Offices
330 West 42nd Street, New York 36, N. Y.

PAK-RAPID
presents



**FULLY AUTOMATIC
LOW COST
TABLET
PACKAGING
MACHINE**

- STRIP PACKS
single or double widths
- CUTS OFF
one, two, three, four,
six and twelve long
- OTHER COUNTS AVAILABLE

PAK-RAPID INC.

530 N. 21st Street, Philadelphia 30, Pa.
New York Representative I. J. WHITE CO. AI 4-0180

The Lure
OF THE BEAUTIFUL

The Magic Touch
in Selling

STYLED BY E. VON HARTMANN
First IN DECORATIVE PACKAGING
TECHNICAL MARKETING
SERVICE

CREATORS
ART SERVICE

110 WEST 40th STREET • NEW YORK 18, N. Y.
LO 3-5140 PE 6-7534

GLAMOURIZE THE MERCHANDISE

U. S. patents digest

and bottom platforms each consisting of a pair of rails extending longitudinally of the structure and forming a corner edge of the same, a pair of rails extending transversely between said longitudinal rails at opposite ends thereof and secured thereto.

Packing Element, N. M. Sider (to Container Corp. of America, Chicago, Ill.). U. S. 2,609,136, Sept. 2. A packing element of paperboard comprising a substantially vertical panel, upper substantially horizontal panel hinged at one side edge to the upper edge of vertical panel, lower horizontal panel hinged at one side edge to the lower edge of vertical panel and a plurality of tongues hinged to the other side of upper panel.

Carton, P. A. Toensmeier (to The Bartgis Bros. Co., Ilchester, Md.). U. S. 2,609,137, Sept. 2. A carrier which comprises a pair of like side walls, an end wall attached to each side wall at each end thereof, bottom wall connected to side walls at lower ends, a partition extending lengthwise within carrier and connected to end walls at opposite ends thereof.

Carton and Carton Blank, A. J. Weiss (to Robert Gair Co., Inc., New York, N. Y.). U. S. 2,609,138, Sept. 2. A carton comprising four side panels forming in cross section an elongated rectangle, an end flap adjoining each of side panels and of a width substantially coextensive with its respective side panel, two narrower end flaps foldable inwardly to form inner end flaps.

Apparatus For Sealing Containers, R. A. Farrell and W. G. Mueller (to Marathon Corp., Rothschild, Wis.). U. S. 2,609,735, Sept. 9. A machine for making a leakproof package comprising means for positioning a tubular carton having end flaps with the flaps in a plane substantially at right angle with respect to the main carton body and a membrane covering the carton end, with the margins thereof overlapping portions of said flaps, a heated tubular sleeve having its inside dimensions substantially the same as the carton end, with a member disposed and guided within said sleeve.

Cosmetic Container, F. R. Book, Jr. (to The Eyelet Specialty Co., Waterbury, Conn.). U. S. 2,609,922, Sept. 9. A cosmetic container comprising a tubular body shell closed at one end and open at the other end, a cosmetic cup having a central cylindrical small-diameter portion and a wide-diameter portion at its opposite ends, wider-diameter portions closely fitting inside of body shell but permitting axial sliding movement of cosmetic cup within body shell.

Bag Package With Fork-Lift Handling Means, B. E. Simonton (to St. Regis Paper Co., New York, N. Y.). U. S. 2,609,923, Sept. 9. A package of superimposed fibrous sheets comprising: a pair of hollow tubular core members in spaced substantially parallel relationship, core members each having an orifice at least at one end thereof.

Tumbler Carrying Carton, H. V. Bolding (to The Bradley & Gilbert Co., Louisville, Ky.). U. S. 2,609,981, Sept. 9. A blank for forming a carrier carton comprising an elongated rectangular sheet having upper and lower longitudinal edges and opposite side edges, upper longitudinal score line parallel spaced from upper edge to define handle portions, having partition-forming portions between upper intermediate and lower intermediate score lines.

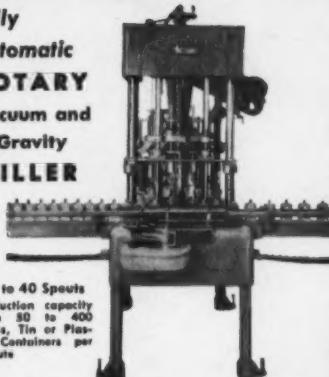
Container With Flat Top and Integral Overcap, G. C. Reid and S. S. Jacobs (to American Can Co., New York, N. Y.). U. S. 2,609,985, Sept. 9. A container for liquids comprising a tubular body having a substantially flat composite end member secured thereto in a laterally projecting end seam.

Bag Weighing and Filling Machine, W. R. Peterson (to St. Regis Paper Co., New York, N. Y.). U. S. 2,610,020, Sept. 9. A weighing device, a spout mounted on weighing device, a bag saddle for holding a bag in filling relation with said spout, a gate for governing a flow of material through spout and a fluid-actuated power cylinder having a piston operable to perform a power stroke divided into a first part and a second part.

Electrothermal Bag Sealer, C. M. Williamson and E. D. Boiselle (to Sears, Roebuck & Co., Chicago, Ill.). U. S. 2,610,137, Sept. 9. A hand tool for sealing a thermoplastic bag, comprising a pair of lever arms pivoted together intermediate their ends, arms on one side of pivot serving as handles; relatively long, narrow transverse jaws on ends of arms opposite said handles, jaws having a plurality of interengaging deformations cooperating to provide a tortuous path for gas tending to enter or leave a container sealed by said tool and electrical means for heating of said jaws.

mrM FILLERS

fully
automatic
ROTARY
Vacuum and
Gravity
FILLER



12 to 40 Spouts
Production capacity
from 50 to 400
Glass, Tin or Plastic
Containers per
Minute

Designed for quick changeover and thorough cleaning. Fills all types of foamy and still liquids—brines, vinegars, chemicals, drugs, perfumes, syrups and cosmetics. All sizes and shapes of containers.

A model for every need—
from 10 to 400 containers per minute

portable
semi-automatic
VACUUM
FILLER



4 to 6 spouts

Production capacity up
to 30 containers per
minute.

Particularly suited for
companies with modest
packaging requirements.
Ballbearing casters permit
moving the filler
anywhere. Low in cost
and simple to maintain.
Ideal auxiliary filler.

- Quick changeover from one ounce to quarts.
- Fills directly from floor level reservoir.
- Equipped with its own motor and vacuum pump.
- Fills all foamy and still liquids.
- Extremely compact, occupies little floor space.

Write Dept. MP-11 for literature on
complete MRM line.

mrM company, inc.

191 Berry Street, Brooklyn 11, N. Y.

Manufacturers of a complete line of fully
automatic and semi-automatic filling equipment
and fully automatic labeling machines.



A glass pack is a convenient pack. Customers like the visible inventory they get with glass, and the safe convenient way foods in glass can be stored in refrigerators.

"More shoppers are buying more merchandise in GLASS"

says W. W. Rogers, Rogers Markets, Inc.
520 West Jefferson Street, Fort Wayne 1, Indiana

"One of the biggest advantages of today's supermarket is the attractive self-service array of foods in appealing varieties.

"We look very favorably on fruits and vegetables packed in glass because we have found that they add to variety which appeals to our consumers. We find an increasing number of today's shoppers are attracted to and buying more merchandise in glass, no doubt because they ap-

preciate the advantages of glass, such as ease and accuracy of selection; containers that are easy to open and to store unused portions in.

"We modestly feel that part of our continuing success is due to taking advantage of merchandise and packages with maximum merchandising appeal, and we certainly feel that foods in glass have the kind of selling force which helps build volume."



Glass displays, like those at Rogers Markets, Inc., build volume . . . increase total sales in canned-goods departments because consumers like the color, sparkle and honesty of glass packages.



The
time-proved
glass package
for prepared foods is
the only visual package
for processed* foods!

Glass has long been a selling package for jellies, ketchup, pickles, peanut butter and many other products. Now this same selling power has gone to work for the canned-goods department making extra sales, impulse sales.

Proof of this was established by careful market tests in the American Stores of Philadelphia. There, the new technique of displaying both glass and tin packs in the same space previously used for tin alone, paid off, in

every instance, by increased sales. TOTAL SALES of all items tested increased 35.6%.

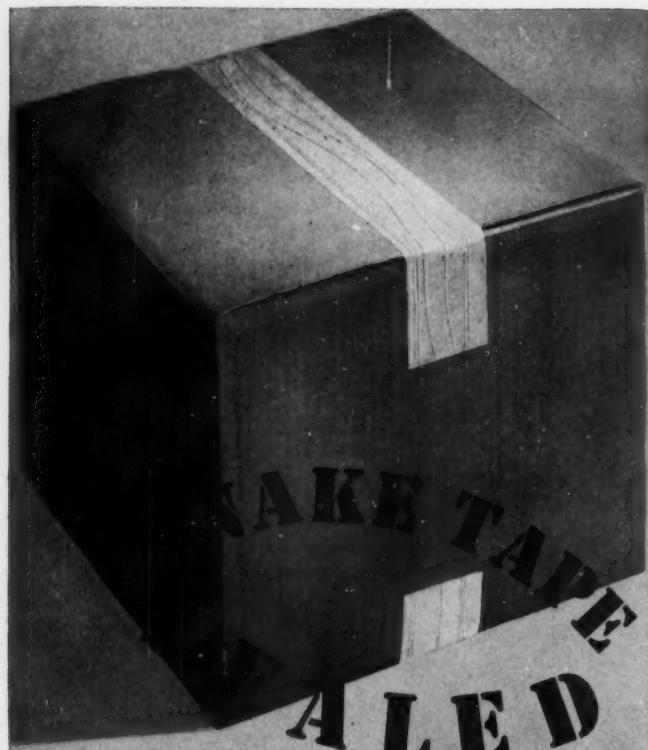
Not only does visibility at point of purchase create initial sales, but the convenience of glass to the consumer pyramids repeat sales. Such advantages as visible inventory, and safe, easy refrigerator storage of unused portions are increasingly important to convenience-minded housewives.

Duraglas CONTAINERS SELL FOOD BY SIGHT

TRADE MARK REG. U.S. PAT. OFF.

*Heat-sterilized in container

OWENS-ILLINOIS GLASS COMPANY, TOLEDO 1, OHIO • BRANCHES IN PRINCIPAL CITIES



ACCEPTED for parcel post, railway express, air express, and truck shipments.

ACCEPTED for carload and less than carload rail shipments where rule 5, section 1(c) of Uniform Freight Classification applies.

ACCEPTED by more and more shippers everywhere because only two strips of reinforced gummed Snake Tape seal cartons stronger, faster and cheaper.

Waterproof, Reinforced, Choice of 6 widths. Easily dispensed by any "cut off" type machine.



Please send 20 yd. test sample reinforced Snake Tape

.....
Sign here, attach to your letterhead. Send now to:

ANGIER CORPORATION, Framingham 11, Mass.

Since 1895

Distributors in Principal Cities

Frozen foods in cans

(This article continued from page 90) set in a bowl of lukewarm water. It is true that inconveniences of opening and thawing have been the most frequent consumer complaints against non-metal frozen-food packages.

A metal can obviously will not become soggy or leak when the contents thaw. Interestingly enough, this very point was once strongly raised against use of hermetically sealed metal cans for these products at an earlier stage of the frozen-food industry, when it was claimed that a container which made it impossible to tell whether the contents had thawed was not safe. This viewpoint was also in part based on the feeling that a container which did not clearly indicate thawing of contents by feel or appearance would lead to unintentional refreezing of thawed food—a practice which destroys the texture, flavor and appearance of most frozen foods. Many packers now using cans guard against this possibility with a label warning against refreezing once thawed.

Label copy of the various packers occasionally stresses the fact that the can of frozen food is opened like any other hermetically sealed can—for example, Sunset Frozen Foods, Inc., Fredonia, N.Y., uses the line "Open with a regular can opener" twice on the can, once in a panel describing contents' quality and again, in bold capital letters, under the directions for serving. Labeling of nearly all of the packers suggests use of cold or lukewarm running water to accelerate thawing. The label of the Madrone Brand, distributed by Driscoll Strawberries, Inc., San Martin, Calif., stresses the fact that "Thawing may be hastened by immersing this can in warm water for about 20 minutes." Nifty Foods Corp., Brockport, N.Y., on the label for its 20-oz. can of pitted red sour cherries, uses a bold face for its "Defrost in unopened container" instructions and suggests holding the can under warm running water for several minutes.

The fact that, as one can manufacturer puts it, "any packer contemplating the use of a can is interested only in the quality items" seems a strong indication that frozen-food packers are now willing to entrust valuable frozen-food brand names and trademarks to metal cans with confidence that distributors and retailers, as well

4 IMPORTANT REASONS WHY
 R. C. METAL
 END FIBRE CONTAINERS
 ARE YOUR BEST BUY

Your Four-Star Answer
 to Uninterrupted
 Production

Your Product
 in Good Shape
 when it's
 Packaged in
 an R. C. Can



★ **STRONG.** Durability is one of the pre-requisites of every R. C.-designed container. Asphalt-impregnated and paraffin-lined containers are only two examples of the thorough product protection offered by R. C. Packaging.

★ **COMPLETE VARIETY OF SHAPES AND SIZES.**

★ **FAST, DEPENDABLE DELIVERY.** Free from the production headaches attending material cutbacks. Four factories to serve you.

★ **LOWER COST.** In spite of these assets for smart-looking, up-to-date packaging, R. C. containers cost less to produce, less to ship.

"Have Your Next Package
 'CAN-gineered' by R. C."

R·C· CAN COMPANY

MAIN OFFICE
 and Factory 103 Chambers St., St. Louis 6, Mo.
 Branch Factories: Arlington, Tex.; Rittman, O.; Kansas City, Kansas

SALES OFFICES:

C. E. DOBSON, 1003 Carondelet Bldg., New Orleans 12, La. • R. C. CAN CO., 225 West 34th St., New York, N. Y. • L. C. MORRIS CO., 1125 Spring St., N. W., Atlanta, Ga. • S. W. SCOTT, 408 McCall Bldg., Memphis 3, Tenn. • E. F. DE LINE CO., 224 W. Alameda, Denver 9, Colo. • W. L. BENNETT, 126 S. Third St., Minneapolis 1, Minn. • CAN SUPPLY CO., 1006 W. Washington Blvd., Los Angeles, Calif. • GARRET P. KELLY, 316 E. Silver Spring Dr., Milwaukee, Wis.



2 WAYS TO BETTER PACKAGING!

CLIMATE-PROOF PACKAGING

CARGO



CARGO PACKERS PACKAGING AIDS

-SAVE TIME AND MONEY!

CARGO CUBE MASTER — A durable all plastic calculator designed to give high accuracy cubic readings of shipping containers. The user merely lines up the length, width and height scales and the answers will be given in cubic feet. An ideal computer anyone can use — saves time and increases efficiency in any packaging or shipping department.



THE CARGO STRIPER — The ideal tool for shipments to be striped to Signal Corps and Air Force specifications. Equipped with a rod which permits adjustments for various size cases. An important feature is a reservoir which automatically wets the roller. Cargo special links are available. Refilling reservoir is accomplished easily and speedily without tools.

Increase production, increase shipping efficiency with these efficient packaging aids.

Write for complete catalog and prices!

SPECIAL PRODUCTS DIVISION

CARGO PACKERS

INCORPORATED

73 RUTLEDGE STREET
BROOKLYN 11, NEW YORK



NEW BROCHURE AVAILABLE ON
COMPLETE PACKAGING SERVICE

A specialized operation han-
dling all details of military
packaging. Ask for your copy.

EXPERTS IN MILITARY

AND CLIMATE-PROOF PACKAGING

FOR LOW-COST ATTRACTIVE LABELING OF
YOUR PRODUCTS, GET ALL THE FACTS
ON THE NEW "OLIVER" SYSTEM



Can be mounted on "Oliver" Wrappers now in use . . .
also on other makes: Package Machinery, Hayssen, Battle Creek, and
some National, AMF, Campbell machines.

Save dollars daily!



and thousands of stores and plants to cut costs.

AUTOMATIC LABEL IMPRINTER

Imprints essential data on "blank" labels. Items of imprint quickly changed, automatically registered. It avoids waste.

Write Today for Complete Information

OLIVER MACHINERY COMPANY • GRAND RAPIDS 2, MICHIGAN



ROLL-TYPE LABELS smart, custom design

Known for their distinct beauty! Labels have lustre printing surface. Reverse side has special thermoplastic coating. Let us design a label or family of labels for your special needs for production and sales. Ask for samples and prices.



as consumers, have learned how to treat a frozen food regardless of the type of container.

There has been some conjecture about possible effects of widespread use of cans for retail packs of frozen fruits and berries on the marketing picture for these foods. This picture has been dominated by strawberries largely because strawberries do not lend themselves to conventional hot-process canning, a fact which the frozen-food field exploited almost from its birth. Moreover, unlike some of the berries, strawberries are readily accepted by consumers in a sliced, juicy, pack which eliminates most of the problems of handling berries and strawberries are not as subject to oxidative browning as many fruits.

However, while strawberries account for about 80% of the total of frozen fruits packaged in retail sizes today, they account for only about 38% of the total fruit and berry freeze—the other frozen fruits and berries go mostly into institutional packs (in contrast with the frozen vegetable pack, which splits almost 50-50). Can makers are hoping that the success of the retail sizes of frozen strawberries in metal cans will encourage packers of other frozen fruits and berries to go after larger retail markets, using cans. It is felt, for example, that fresh-frozen peaches have certain taste advantages over the conventionally canned fruit and could well capture public favor; if this comes about, the can makers are anxious that the peaches be marketed in cans.

A frozen fruit packed almost entirely in institutional sizes in the past has been the pitted red sour cherry, intended mostly for pie making. The retail-size one-pie package of this fruit in metal has been gaining ground in the last few years. Red raspberries and blackberries are other fruits which the can men feel may find a wider retail market in an all-metal retail-size can.

PARDON OUR PAPER

We regret that due to a strike that is tying up shipments from our regular supplier, the quality of the paper used in this issue is not up to our usual standard. We shall return to our regular weight of coated stock with the next issue, or as soon thereafter as possible.



why stick your neck out when buying folding cartons?

QUALITY-CONTROLLED EMPIRE CARTONS ALWAYS MEASURE UP TO YOUR REQUIREMENTS

There are good reasons why you never risk your neck when you buy Empire folding cartons. Empire Box controls carton quality throughout production — from paperboard... made in our own mill... to finished product.

Empire Box keeps your costs under control, too, by utilizing up-to-date, more efficient production techniques. And Empire's multi-plant operation helps you save on shipping costs — an important money-saving factor.

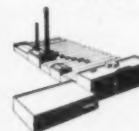
Call or write Empire Box when next you buy folding cartons. You can always depend on Empire Box to deliver fine quality folding cartons at prices you can afford to pay.

EMPIRE BOX CORPORATION

GARFIELD, N. J. • CHICAGO, ILL.



3 GREAT PLANTS
TO SERVE YOU



Garfield, N. J.



Stroudsburg, Pa.

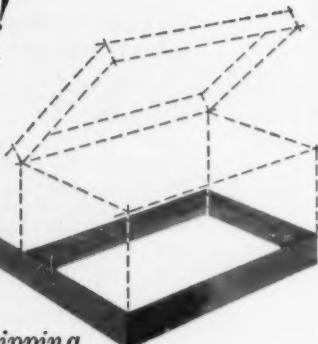


South Bend, Ind.

This attractive package is representative of the fine folding cartons Empire Box is producing for leaders in industry.

REEVES specializes in tapes

to solve
your box-binding
problems!



- **For Glue Stripping Machines**
- **Holland Finished Cloths**
- **Dry Gummed Tapes**
- **Thermo-Plastic Tapes**

Reeves tapes combine extra-strength with thinness . . . are specially finished to prevent glue seepage and color change.

They're made by experts who know your problems and how to solve them. Each lot is tested on Reeves own stripping machine to insure you of smooth, trouble-free production. If you are hampered in production by tapes that don't perform right—call on Reeves.



For further information and a special sample kit of Reeves Box Tapes, write us on your company letterhead.

REEVES BROTHERS INC., W. Harris Thurston Division
54 Worth Street, New York 13, N. Y.

Retail service

A new joint packaging service for retail stores has been announced by Gardner Board & Carton Co. and the Sorg Paper Co., both of Middletown,



Exhibiting the new joint packaging program are (left to right) E. T. Gardner, president of Gardner; D. G. Driscoll, president of Sorg; Colin Gardner and Ollie Nash, sales vice presidents of the two firms.

Ohio. Through a coordinated program of design and production, the two firms will combine forces to offer a line of folding boxes, wrapping paper and bags in matching designs and colors, with Gardner supplying the boxes and Sorg supplying the paper and bags. A retailer will be able to obtain the complete store-wide packaging service from either of the two companies or their distributors. The first group of related packaging designs will be presented to retail store buyers the first of the year.

The two companies say of their joint project that it allows "each of us to do what we know how to do best." Gardner has been making retail boxes for 26 years and last year opened a new \$2 million retail box plant at Lockland, Ohio. Sorg, presently celebrating its 100th anniversary, has concentrated on producing specialized papers for printing and conversion, but several years ago started a program for development of aniline and rotogravure printing, resin coating and other secondary processes.

Mylar experimental

In its November issue, *Modern Plastics* throws cold water on any hopes that packagers may have had of making immediate commercial use of the new Du Pont polyester film, which it calls "Mylar."

Mylar has been hailed as a definitely superior film, with strength, clarity and inertness greater than that of cellophane or acetate and, since its availability in pilot-plant quantities was first announced by Du Pont several months ago, packaging researchers

Filled Packets within Packets

...another capacity
of Brown Bag
Packetting Machinery

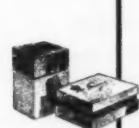
If packets, or small flat packages of your product require inserting in outer envelopes — Brown automatic filling equipment can do the job. With this new Brown packetting method, you combine the twin advantages of an eye-catching outer envelope and extra protection for the inner packet — containing ounce fractions to one ounce quantities of your food, drug or cosmetic powders.

Ask Brown for an inserting quotation by sending samples of your filled packets.

**BROWN BAG FILLING
MACHINE CO., INC., FITCHBURG, MASS.**

Representative: Kruse Packaging Machinery, 5807 West North Avenue, Chicago 39, Illinois.

West Coast Representative: Peter D. Bowley & Assoc., 210 Mississippi Street, San Francisco, California.



"When
packaged in
'fur'
products
purr"



And the 'fur' favored by most packagers is flock —Clarendon Flock... those tiny clipped-lengths of luxurious cotton and regal rayon. We market this irresistible outer raiment in bulk to paper processors, product manufacturers, packaging specialists and display builders who, for dramatic enrichment, apply it to paper, glass, metal, cork, plaster and similar materials.

Flock is a fascinating stimulant—and for pennies, an ounce adds a pound of allure. Check your suppliers—or, for complete information, feel free to contact us direct.

CLAREMONT FLOCK

Clarendon Flock... the plush that sells! Available in 18 brilliant colors from paper suppliers, affixed to sheets and headboard. Can be printed, stamped, scored and die-cut. Imagination, alone, limits its uses!

CLAREMONT WASTE MANUFACTURING COMPANY
The Country's Largest Manufacturer of FLOCK
CLAREMONT, NEW HAMPSHIRE

for best marking results use

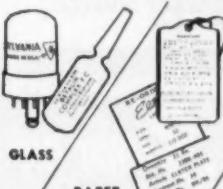
MARKE M[®]

METHODS



MARKE M MACHINES
MARKE M TYPE
MARKE M INKS

FOR MARKING PRODUCTS, PARTS,
PACKAGES, TAPES, TAGS, LABELS



PLASTIC



FABRIC

RUBBER

PRESSURE
SENSITIVE
TAPE

WOOD

PAINTED
SURFACES

RED AND BLACK

ALUM

IRON

LEATHER

PLASTIC

METAL

GLASS

PAPER

BOXBOARD

MARKE M

BETTER MARKING SINCE 1911

Markem Methods are engineered to solve specific marking problems. The proper combination of a Markem marking machine, Markem type and Markem ink is matched to the individual requirements. Not only are the properties of the surface itself considered, but also local conditions of temperature and humidity together with your own handling technique during production, storage and packaging. That is why it is so important that the Markem Method be followed completely.

When you have a marking problem, ask Markem about it. Send a sample of the item to be marked and details of your needs. Markem engineers have worked out practical solutions for many manufacturers. Markem Machine Company, Keene 1, N. H.



- CANDIES AND CONFECTIONS
- BAKERY PRODUCTS, FOODS
- SOAPS, TISSUE HANKIES
- PREPACKAGED MEATS
- BANDAGES, CAMERA FILM
- ICE CREAM BARS AND NOVELTIES



and 101 other miscellaneous products of every type and description

No matter how odd or irregular the shape, how fragile or solid the product — you can eliminate packaging bottlenecks and wrap it *faster, cheaper and better* on the automatic continuous feed, Campbell Wrapper. Normal operation wraps 150 single or multiple units per minute, with many special installations running as high as 300! Labor savings are tremendous, as in most cases only one person is needed for feeding and operating. Machine automatically positions imprinted label and seals wrap in most any style desired — including hermetical sealing. Likewise, special automatic feeds can be furnished. No other wrapping machine is so versatile — so adaptable to so many different kinds of products. Send us a sample product — we'll be glad to help solve your packaging problems.

We are contributing to the nation's defense program by providing a large part of our increased production facilities for building precision armaments.



Write for this booklet today

New York:
55 West
42nd St.



Manufacturers of Ailine and Gruave Presses, Folders, Interfolders, Laminators, Wakers, Embossers, Slaters, Sheeters, Roll Winders, Pack Lapping Machines, Creper and Tissue Converting Units.

have been excited about its possibilities. Samples have been evaluated in many packaging laboratories.

But *Modern Plastics* declares that commercial quantities of the film probably will not be available before 1954 and that even then the potential demand for non-packaging applications—for electrical insulation, pipe coverings, storm windows, tape, etc.—may far outdistance packaging in the initial scramble for supplies.

Modern Plastics also raises a question as to the cost factor in packaging. It points out that Mylar now sells at \$4 a pound for $\frac{1}{4}$ -mil film, as against 50 to 60 cents for cellophane.

However, it is true that $\frac{1}{4}$ -mil Mylar, which appears equivalent to or better than coated cellophane four times as thick, has a yield value, on an area basis, equivalent to cellophane at only \$1 a pound.

Cellophane, it should be noted, sold for \$2.65 a pound when it first appeared in 1924 and Mylar may show similar reductions when and if it gets into volume production.

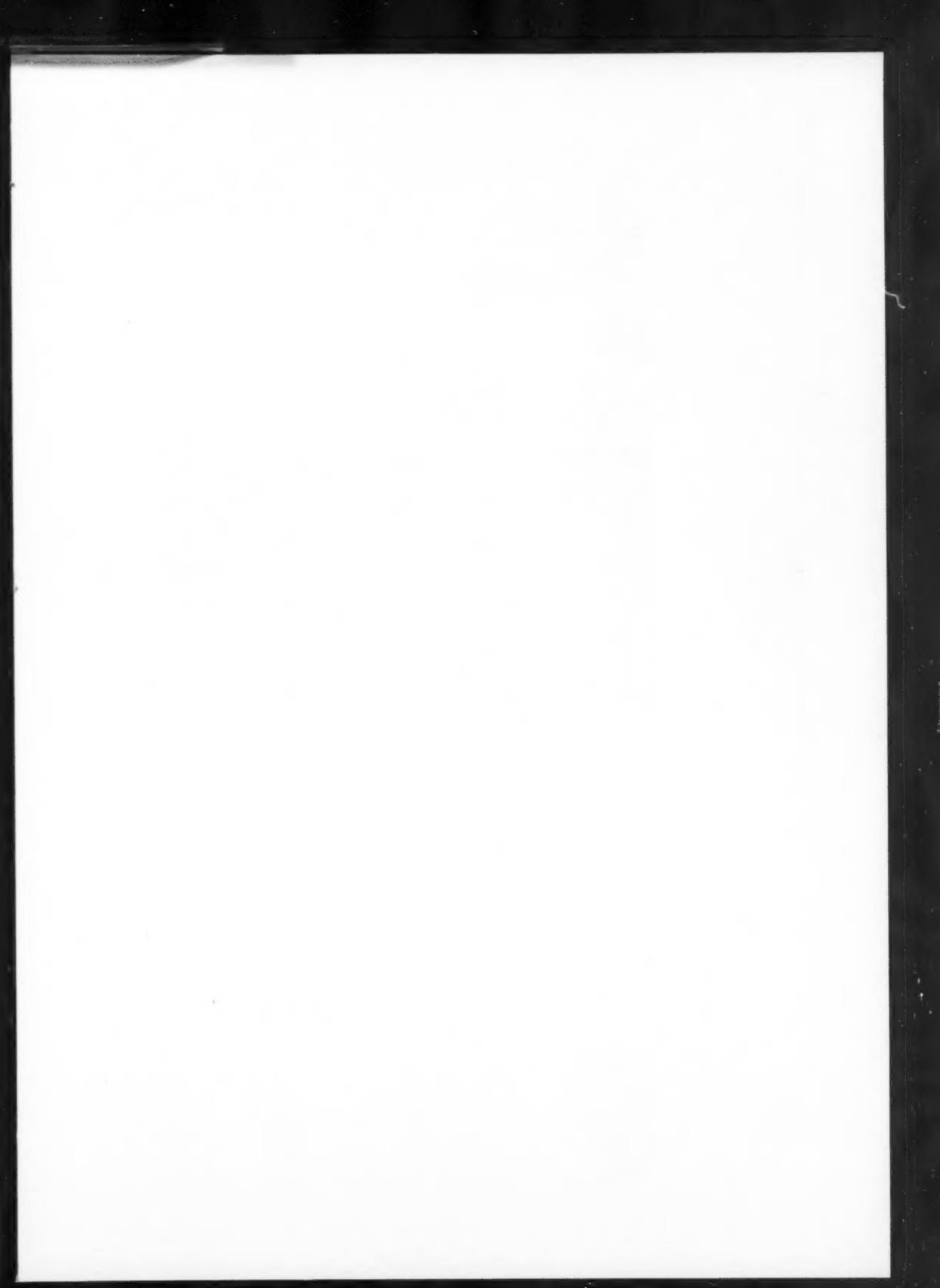
The plastics magazine agrees that Mylar may have a very important future in packaging when its cost has been reduced, heat-sealing problems solved and special formulations of inks and adhesives developed.

Swedish design

(This article continued from page 126) cartonboard covered with bleached sulphite paper.

A gimmick which is typically European is illustrated by the latest Orebro package for alphabet cookies. This is a one-piece folding box with a single glued body seam, designed to look like a miniature traveler's suitcase in bright red with yellow trim. The travel "stickers" scattered around on the box are in reality advertisements for various other Swedish products, whose manufacturers pay for this representation on a "circulation" basis. Orebro expects to be able to lower the price for this package if the "edition" goes to 300,000 packages. The Orebro name appears only on the lock flap of the suitcase.

CREDITS: Designs of all packages illustrated, Tovar Reklam, Kungstensgatan 20, Stockholm. Orebro folding boxes, Akerlund & Rausing, Lund. Tray for Stinas, Victor Pettison's Bokindustrie, AB, Stockholm. Seger soap packages and Safir box lithography, Skanska Litog. AB, Malmö.





Schmidt Labels from shelf

Church's
Naturally Sweet
No Sugar Added

Clapp's
PEAS

Lindsay

MAMMOTH
LIVES

Winds

STEX
STEW

GIHARNELLI
MILK & COAT

100
100
100
100



speed your product
to shopping cart

The difference between a good label and a poor one is often the difference between the product that goes into the shopping cart and the product that sits on the shelf.

And the product that sticks on the shelf soon disappears from the store altogether. Today's market operator has little patience with a product that doesn't move... and move fast.

We know how to put Sales Speed into Labels... sales impact that captures the consumer's eye and her interest when her purse is open. We've been doing it for years... on canned and packaged products of every kind... for food processors far and wide, big and little.

Let Schmidt *know-how* add speed to your sales with labels designed for today's stream-lined food store selling.

Schmidt LITHOGRAPH
COMPANY

SAN FRANCISCO • LOS ANGELES • OAKLAND
FRESNO • SACRAMENTO • HONOLULU, T. H. • SEATTLE • PORTLAND • DENVER
HARLINGEN, TEXAS • SAN ANTONIO • ORLANDO, FLORIDA • CHICAGO • NEW YORK

THIS INSERT PROCESSED WITH
SCHMIDT "LUSTERCOAT"
HIGH GLOSS LACQUER

S. L. 5



Clearsite

Plastic Containers That Sell!
place your product on dress parade

RAISE SALES ON SIGHT

Clearsite Plastic Selling Containers compliment your products—customers can trust their eye appeal and buy appeal. Sales raise on Dress Parade! Since your products are "on Dress Parade!" More important, Clearsite Selling Containers protect the contents—are Sales Bright—prevent shopwear—provide a brilliant showcase for the products! Shatterproof Clearsite eliminates normal breakage—saves cost of container and contents! Made from *Featherlight* plastic, Clearsite slashes shipping costs—just 1/5 the weight of glass. Descriptive literature on request.

**Only CLEARSITE Plastic Containers
Give You ALL These Sales Features**

Distinctive • Moisture-tight • Resistant to alkalis, alcohols and weak acids • Labels processed beautifully • Perfectly transparent • A wide selection of colors • A broad range of standard sizes • Caps as you want them—friction-fit or screw type • Protection against tarnishing and shopwear.



Not genuine Clearsite
unless stamped with
CELLUPLASTIC name
as shown.



Clearsite
...is foresight

CELLUPLASTIC Corporation

General Offices: 50 Avenue L, Newark 5, N. J.

Milwaukee • Los Angeles • Detroit • New Haven • Cleveland • Denver
• Minneapolis • Cincinnati • Atlanta • Dallas • Chicago • Jacksonville •
St. Louis • San Francisco • Phoenix • Seattle • Portland • Richmond
• Montreal • Toronto •

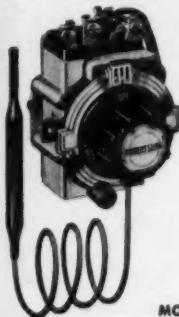
Robertshaw[®] THERMOSTATIC CONTROLS

SERVE THE PACKAGING INDUSTRY IN MANY WAYS



A sturdy, dependable, automatic, rugged, responsive direct-acting, electric thermostatic control for jaw sealers, band or belt sealers, tester equipment, bake ovens, glue pots, etc. (Available also in Reverse-Acting Models.)

MODEL D-1



MODEL H-1



CYCLES AS
A THERMOSTAT



AUTOMATICALLY CUTS
OUT AT SET LIMIT



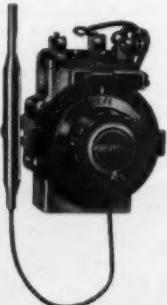
STAYS OUT UNTIL
MANUALLY RESET

A double pole, single throw temperature controller with an auxiliary single pole, single throw switch that automatically cuts off all current and locks switch in an open position whenever the temperature exceeds temperature range by approximately 7° F. in liquid or 12° F. in air. Available in AC only.



A two-circuit thermostat. When two heating elements are used, high heat element automatically cuts in when thermostat calls for heat. When set temperature is reached, main contacts are automatically broken and low, or holding temperature is cut in to function until drop in temperature again calls for heat.

MODEL F-1



Write for descriptive literature.

In Home and Industry, **EVERYTHING'S UNDER CONTROL**



Robertshaw

THERMOSTAT DIVISION

ROBERTSHAW-FULTON CONTROLS COMPANY
YOUNGWOOD, PENNSYLVANIA

Foil in action

A manufacturer of aluminum foil is demonstrating the uses of his product to package industrial nonfood items and supplies—in a 30-ft. trailer unit



fully equipped with dip tanks, heat-seal machinery, vacuum pump, air compressors and its own self-contained electric power plant.

A trained crew actually packages products, demonstrating the protective qualities of foil, its adaptability to automatic packaging and its high visual appeal before as many as 30 people at one time.

Typical applications are a foil carton for cooking utensils, canisters for kitchen appliances, pouches for one-time-use put-ups of granulated or liquid products or for small items like rivets and bolts or automotive spare parts such as gaskets.

Arrangements can be made for a demonstration at your plant on written request to the Reynolds Metal Co., 2500 S. 3rd St., Louisville 1, Ky.

New polyethylene use

The use of a polyethylene bottle as a glue feeder on a carton-sealing machine has routed a minor but troublesome source of delay in the packaging line at United Can & Glass Co., Hayward, Calif.

Bottles sometimes broke in refilling

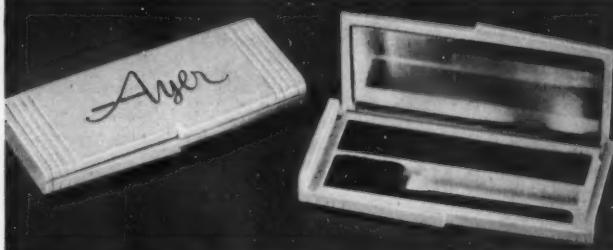


or were smashed when struck by accident with a tool. The unbreakable gallon-size jug is also lighter, always provides a perfect seal and will not ridge a gasket at any connecting point.

CREDIT: Plaxpak bottle, Plax Corp., Hartford, Conn.

BEETLE® PLASTIC

a policy of smart containment for COSMETICS



Attractive mascara box is molded of rich-looking white Beetle Plastic for Harriet Hubbard Ayer by Calumet Manufacturing Co., New York, N. Y.

It's a smart manufacturer who makes a policy of using BEETLE Plastic containers and closures for cosmetics.

Look at Harriet Hubbard Ayer's rich-looking little mascara box.

Molded of glistening BEETLE, this sturdy container resists staining and is not affected by essential oils, alcohol, acetone or other common solvents.

Harriet Hubbard Ayer and Calumet Manufacturing Company, the molder, make a policy of specifying thermosetting BEETLE for this box. They know its excellent properties, reasonable cost, and dependability in easy and economical molding. They know, too, that in any molded-in color—and no rainbow has more colors than BEETLE—this odorless, hard-finish plastic adds quality to the package... sales to the product.

Set a policy of smart containment for your own product. Specify BEETLE Plastic.

AMERICAN Cyanamid COMPANY

PLASTICS DEPARTMENT
32C Rockefeller Plaza, New York 20, N. Y.

In Canada: North American Cyanamid Limited
Royal Bank Building, Toronto, Ontario, Canada

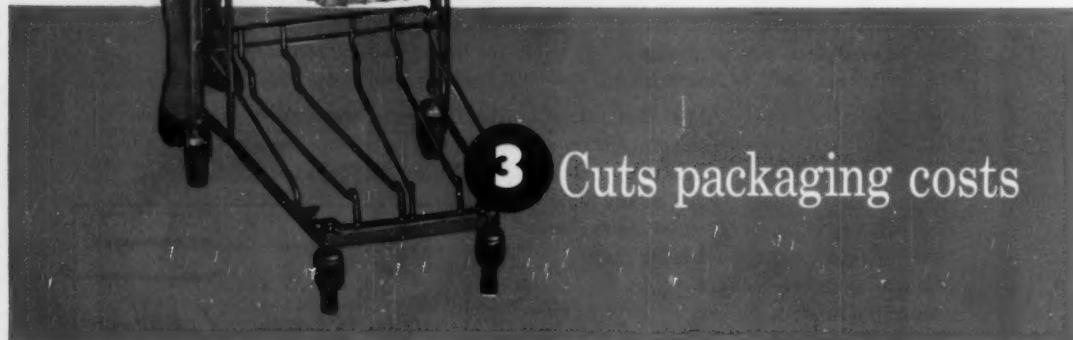
Waxed Paper *packaging*



1 Helps build sales



2 Ideal product protection



3 Cuts packaging costs

SELL MORE... MORE PROFITABLY... WITH

builds profits 3 ways!

BRAND advertising and *brand* merchandising build sales in today's self-service stores. And *brand* packaging with modern waxed paper provides a strong tie-in with your advertising and promotion at the point-of-sale . . . makes *your brand* stand out on crowded supermarket shelves.

Colorful waxed paper packaging combines effective *brand* identification with accurate *product* identification. Build consumer confidence . . . and *repeat sales* . . . through the use of appetizing product illustrations that are always fresh and flavorful . . . *uniform* packaging with proven sales appeal.



WAXED paper preserves the original flavor, freshness, and appetite appeal of your products . . . from your plant to the consumer . . . pays off handsomely in increased sales and maximum shelf life for *your brand*.

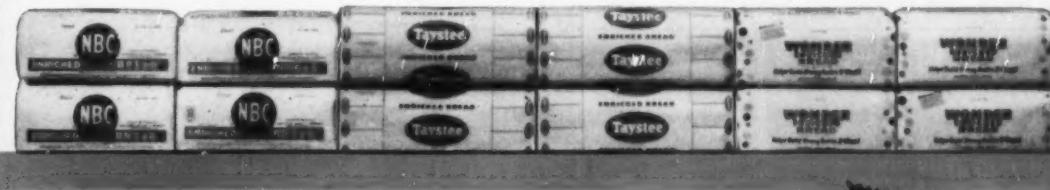
Waxed paper protects products effectively against extremes of temperature and moisture . . . keeps moist products moist, dry products dry. Liners keep all the wholesome goodness *in*—and keep contamination *out*.



WITH rising costs squeezing profits, now is the time to consider the savings you can effect with waxed paper packaging.

Compare the cost of waxed paper packaging, tailored to your merchandising and protection

needs, with your present packaging. You'll find that waxed paper is your best packaging buy . . . helps you build sales and cut costs. Waxed paper packaging is the modern way to sell *more* of your products at a *greater* profit!



MODERN **WAXED PAPER**

WAXED PAPER INSTITUTE, INC., 38 S. DEARBORN ST., CHICAGO 3, ILL.

Waxed paper
Protects
freshness



HOW TO MAKE THEM *BUY* WHEN YOU SELL...

Package your products in the containers that your customers and prospects want. Package in Lerner Plastic Vials because they offer the ultimate in eye appeal and protection and because they give your customers durable, long-lasting containers in which to retain your products. After the contents have been consumed, the containers are re-used for other purposes, and your name remains with your customers as a reminder for additional purchases. You have proved that you use the finest package available, and the cost to you is no more than ordinary packaging.

CONSIDER THESE UNEXCELLED ADVANTAGES OF LERNER PLASTIC CONTAINERS.

- They Are Shatterproof, Assuring Customer Good-Will
- 75% Lighter Than Glass, Saving You Money in Packing and Shipping
- Not Affected by Alcohols, Alkalies, Weak Acids
- Tasteless and Odorless
- Available Clear or Opaque, in a Host of Bright, Lustrous Colors
- Can be Printed or Decorated during Manufacture
- Always Uniform for Easy Labeling, Filling and Capping
- Available with Metal or Plastic Closures

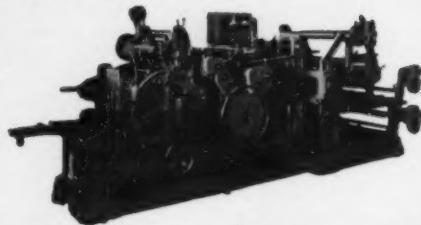
Lerner
PLASTICS, INC.

PIONEERS AND PACESETTERS IN PLASTIC PACKAGING
502 SOUTH AVENUE, GARWOOD, NEW JERSEY

Write for complete catalog information and samples. Let our creative staff help. Lerner is famous for Experience, Service and Creative Engineering.

POTDEVIN Cellophane Bag Machinery

Model III-S produces single or duplex cellophane bags at high speeds. POTDEVIN patented compensator and "electric eye" controls register of pre-printed cellophane.



60 years of
dependable
service

POTDEVIN MACHINE CO.



244 North Street
Teterboro, N. J.

Designers and manufacturers
of equipment for Bag Making,
Printing, Coating, Laminating,
Gluing and Labeling.

Reprints of articles, features and advertisements that appear in this magazine cost so little that you should really consider using them. Many companies make it a practice to have stories which have a bearing on their business reprinted for distribution to their sales staff, customers, prospects, stockholders or to other interested groups.

make profitable use of REPRINTS

If, at any time, there is or has been something in Modern Packaging which you can use in reprint form, in quantities of 100 copies or more, write and quotations will be furnished promptly.

INDUSTRIAL MAGAZINE SERVICE

An Affiliate of Breskin Publications

375 Madison Avenue

New York 22, N. Y.

Industrial awards

(This article continued from page 119) equipment. The metal rim of the unit is fastened directly to a supporting plate or panel of plywood, insuring against movement within the package, and another piece of plywood used within the container provides a further guarantee against movement. This package thus far has completely eliminated damage claims and has also resulted in a saving on material and labor.

Second award in this classification went to Frederick J. Thieme of the Ternstedt Detroit Div., General Motors Corp., for a special mantle-type corrugated container used in shipping painted or chrome-plated upper and side glass channels to auto assembly plants.

Third award winner in Group 1 was a container for shipping fluorescent illuminated plastic signs, submitted by Carl H. Wamser of Everbrite Electric Signs, Inc., Milwaukee. Lower material cost, easier packing, lighter weight and better protection in shipment were among the award-winning features of this entry.

Group 2—Nailed Wood Boxes and Crates: First award in this classification went to Harry A. Hunt, Burroughs Adding Machine Co., Detroit, Mich., for a box used to ship bookkeeping machines. The heavy-duty box is used in combination with a polyethylene bag which enshrouds the entire machine within the container, with silica gel employed as a moisture safeguard.

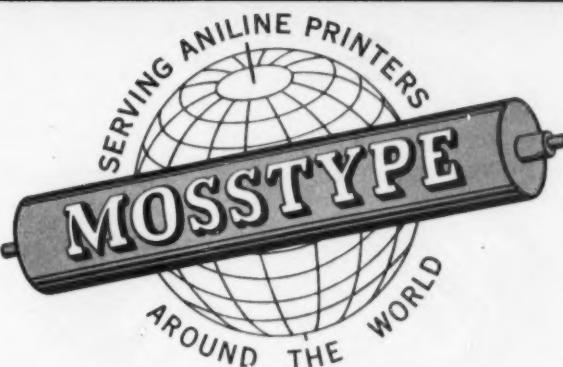
Second award went to Herbert H. Lemmerman, Airco Equipment Mfg. Div., Union, N. J., for a shipping container used for easily damaged electronic tracers. The unit itself is floated within the container, heavily insulated against shock by means of layers of corrugated padding.

Winner of third award in this category was J. Elmer Baird, Aero-products Allison Div., Dayton, Ohio, for a propeller assembly shipping container.

Group 3—Wirebound Boxes and Crates: George J. Weiler of the Engine & Foundry Div., Ford Motor Co., Dearborn, Mich., received top award in this classification. His winning entry was an X-braced wirebound crate for a complete engine assembly which is shipped via domestic carrier, warehoused and displayed. Weight of the contents of this entry is 786 lb., with a total shipping weight of 886 lb. The crate is so designed that the engine

PETER PARTITION CORP.
Manufacturers of Cardboard Partitions
19-21 KEYWARD ST. Telephone: TRIangle 5-4932 BROOKLYN 11, N. Y.

The Complete Service Source
for aniline printers everywhere



- Artwork
- Pattern Engravings
- Pre-Modeready RUBBER PLATES
- Ready-to-Print DESIGN ROLLERS
- STRIPING, TINTING, ENGRAVING ROLLERS
- Steel PLATE CYLINDERS
- Sealing & Bonding CEMENTS
- Adhesive Backing
- Doctor Blades
- Eye-Spot Plates
- MOUNTING and PROVING MACHINES

FREE descriptive literature and technical service on request. Ask us to send you "The MOSSYPER," helpful informative bulletin issued frequently through the year.

MOSSYPE • 33 FLATBUSH AVENUE, BROOKLYN 17, NEW YORK

The SEAL of PROTECTION SEAL-SPOUT*

Its
ALUMINUM

—the aluminum pouring spout for packages of the following products such as cereals, meals, soap granules etc., that protects package contents against—



INFESTATION
DIRT AND DUST
DAMPNESS
SPILLAGE

Note too that packages with Seal-Spouts are—



Let us show you how Seal-Spouts can improve your packages
—how they can be applied right in your production line.



SEAL SPOUT Corp.

363 Jelliff Ave., Newark 8, N. J.

*T. M. Reg. U. S. Pat. Off.

mounts on a base assembly, after which the rear locating frame is fastened and the wrap-around is positioned.

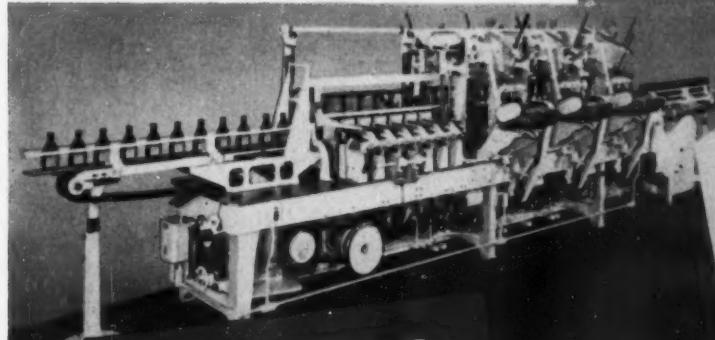
Second award in wirebound boxes and crates went to William G. Joralemon, L. O. Koven & Bro., Inc., Jersey City, N. J., for a unit heating-boiler crate, with third honors going to Harry C. Cladden, Locke Dept. of General Electric Co., Baltimore, Md., for a container designed for shipment of relatively fragile porcelain switch insulators.

Group 4—Cleated Panel Boxes: First award in this group was made to E. J. Lidgard, Studebaker Corp., South Bend, Ind., for a cleated plywood box containing a stripped auto engine. The problem in this instance was to supply a stripped engine assembly that would require no cleaning prior to installation; previous use of a corrosion-preventive substance involved time to remove the material and careless cleaning proved harmful. A corrosion-preventive pack was sought which would be suitable for one year's storage. The cleated plywood box was selected for this purpose because it was well suited to the incorporation of US-1226 compound as a corrosion preventive and was also adequately dustproof, as well as eliminating the need for steel strapping.

A cleated corrugated box containing a heater won second award in this classification for G. H. Wilde, Quincy Stove Mfg. Co., Quincy, Ill. It is estimated by the company that this container will reduce damage claims on the product about 40%. Third award in this category went to W. E. Christpherson, Douglas Aircraft Co., Inc., Santa Monica, Calif., for a "combination air surface pack" used in shipping Douglas empennage (tail surface) assemblies. It consists of a cleated panel box used in combination with a sturdy wooden base on which the fragile aircraft parts are cradled in yokes padded with sponge rubber.

Group 5—General: First award went to T. R. Polglase, Anaconda Wire & Cable Co., Muskegon, Mich., for molded pulp shipping containers for spools of magnet wire. The basic premise of this interesting pack (MODERN PACKAGING, July, 1952, p. 104) is that round objects should be packed in round packages. The molded cases, made in two halves which are held together by metal strapping, consist of a hard outer shell of pulp reinforced with resin and sisal fibres and a soft

ALL
on the
BEE-LINE
for better
labeling



The WORLD
BEE-LINE LABELER...

for fully automatic, dependable, precision application of labels to glass containers. Operates in a straight line, gently but surely, without detours, collisions or traffic jams. Meets your labeling requirements however varied or unusual.

This is the new Model 130 BEE-LINE with three labeling stations for triple production at the most efficient labeling speed. Also available, the Model 65 with one labeling station, Model 135 with two labeling stations and Model 45 for gallon and half gallon bottles, jugs or jars.



THE BEE-LINE LABELER
WORCESTER 3, MASS.
DIVISION OF B. F. MEYER MANUFACTURING CO.



Put yourself inside
the
Package
when
you're buying
plastic closures

For performance on your production lines;
for smartness on the package; for competitive
prices and prompt delivery call, write or
wire our Plastic Division, Bernardin Bottle
Cap Co., Inc., Evansville, Indiana.

Founded 1881

ALL SIZES, ALL COLORS, ALL UNIFORM—

BERNARDIN
Shatter-Resistant
PLASTIC CLOSURES

pulp liner which absorbs impacts of handling and shipping.

Second award in this group was won by a pilferproof pack for aircraft chronometers, submitted by William W. Arnold, Douglas Aircraft Co., Inc., Santa Monica, Calif. The pack consists of a fibre drum, utilizing explosive-type aircraft rivets to seal the cover in place in order to prevent pilferage.

In addition to winning second place in the Group 5 competition, this package was awarded the Harold Jackson trophy as the entry incorporating the most effective packaging feature developed during the past year for the prevention of theft and pilferage.

Third award in the General group went to Kenneth E. Glantz, Department of the Army, San Francisco Ordnance District, for a drum-type pack to replace JAN P-207. This method is cited as a possible replacement package for this type of pack and also for commercial application in the field of shipping and handling of acids, chemicals and other liquids.

Group 6—Export Boxes: Top honors in this category were awarded to Wilburn Couch, GMC Truck & Coach Div., Pontiac, Mich., for the packing of sealed beam headlamp units. This pack, used for both domestic and export shipment, speeds packaging, provides greater product protection and lowers packaging cost, having produced a saving of 33 1/2% per unit. Materials incorporated in the pack are VPI-paper, a fibreboard metal-end can, a weather-resistant corrugated carton and a nailed wooden box measuring 40 by 17 by 15 1/2 in. The sealed beam units are mechanically sealed in the containers by a crimping operation with the VPI paper within as an anti-corrosion agent. Twenty of the containers, in turn, are placed in the corrugated shipper and outer wooden box. This arrangement increased production of packaging from 125 units per hr. with 10 persons to 450 per hr. with same personnel.

Second award went to Earl K. Gustin, Bendix Products Div., Bendix Aviation Corp., South Bend, Ind., for the packaging of a 24-in. aircraft brake. This brake is shipped to depots for reshipment to the field as required and weighs 268 lbs. The container consists of a wirebound box with a floating-type inner pack incorporating a heat-sealed bag of foil-cloth barrier material.

George J. Weiler, Ford Motor Co., Dearborn, Mich., received third award

in this classification for a tank engine flywheel which was cited for ease of packing and unpacking.

Group 7—Materials Handling: First award was given to Edward J. Runser, Jr., General Electric Co., Erie, Pa., for a new type of box-lifting device used for refrigerators and food freezers. With this unit, which makes it possible to lift heavy units from one side, G.E. is able to handle five appliances at once, in comparison with the limit of two appliances with the old-style box hooks formerly used. Also, it is now possible to stack the rows closely without gaps between the piles, whereas formerly there were 6-in. gaps between rows which took up valuable storage space.

Charles A. Berry, Automotive Air & Vacuum Brake Div., Midland Steel Products, Detroit, won second award in this category for a palletized wire-bound crate used for air compressors.

Third place in this classification was awarded to John C. Hencel, Westinghouse Electric Corp., Beaver, Pa., for a "Cargotainer" pack of molded plastic electrical circuit breaker bases. The pack consists of a heavy-gauge wire container with 10 re-usable corrugated board separators and replaces 20 shipping cartons and many handlings.

Awards for the packaging and materials-handling competition were made at the annual award dinner on Oct. 15 in the grand ballroom of the Hotel Sherman. In each of the seven classifications, first prize consisted of a blue ribbon and a cash prize of \$100 to the individual submitting the top entry, with a red ribbon and \$50 and a white ribbon and \$25 going to the second and third place winners, respectively. The two special awards—including the Irving J. Stoller award for interior packaging and the Harold Jackson trophy for the most effective safeguard against theft and pilferage on overseas shipments—were also made as a feature of the dinner. Edgar Ansel Mowrer, well-known foreign correspondent, was the featured speaker at the award dinner, talking on the subject, "Foreign Affairs and the Coming Election."

CORRECTION—On p. 132 of our September issue, we credited Federal Container Corp., Minneapolis, as supplier of the glass tumbler used for packaging Kroger salted peanuts. Actually, the tumbler is manufactured by the Federal Glass Co., Columbus 7, Ohio. We sincerely regret this error.

perforations for particular packagers



Roto Bag
NOW OFFERS A CHOICE
OF ATTACHMENTS
FOR AUTOMATICALLY
PERFORATING BAGS

Differing ventilation problems require different solutions. Roto Bag believes that this choice of perforations will answer your special requirements. Both perforating units are standard accessories to all Roto Bag machines. These devices do not complicate or reduce regular bag production.

CIRCULAR PERFORATION

Two longitudinal rows of holes whose number may be varied and which may be placed laterally as desired. Excellent for all packaging materials.

PARALLEL VENTS PERFORATION

Length of vent can be altered to suit. Perforation intervals and lateral placement are adjustable. This type adaptable for Polyethylene and Pliofilm only.

FOR SAMPLE PERFORATIONS

WRITE:
Roto Bag
MACHINE CORP.
130 EAST 13th STREET, NEW YORK 3
ASK FOR SPECIFICATIONS OF OUR
FAMOUS BAGMAKING MACHINES.

CLASSIFIED ADVERTISEMENTS

Modern Packaging reserves the right to accept, reject or censor classified copy.

EMPLOYMENT • BUSINESS OPPORTUNITIES • EQUIPMENT (used or resale only)

MACHINERY FOR SALE

FOR SALE: 1-Type A and 1-Type B Transwrap Machines; 2-Brightwood Box Machines, with collapsoers; Std. Knapp Self-Adjusting Glue Sealer & Comp. Unit; Pneumatic Scale Packaging Lines; 1000 lb. Pneumatic Scale; Standard Capper; Capco SIF Capper; 7-Vacuum & Gravity Filters, S/S fitted; Stokes & Colton Auto. Tube Filters & Closers. Only a partial list. Send us your inquiries. Consolidated Products Co., Inc., 16-20 Park Row, N. Y. 38. Barclay 7-0600.

OVERSTOCKED—No Reasonable Offer Refused. International S. S. Straightline 160/min. Vacuum Filler. Resina Models S and LC Automatic Cappers. CRCO New Way MH Wraparound Labeler. Stokes and Smith A Transwrap Filler. Capco 4 head Rotary Capper. Island Equipment Styrene Bottle Capping Machine. Clegg Smith G-100 and HG88 Auger Powder Filler. Triangle Electric Tri-Pak G2C, A6CA Filler. Filler 4-Head S. S. Filler. Knapp 429 and Cees Carton Closers. Pony ML and M Labeler. Pneumatic Scale Auto. Cartoning Lines, 60 and 30 per min. Cees, Riddings and Jones. Jones Automatic Cartoning Units. Package Machinery Co. CA2, DFI, FA and FAQ Wrappers. Hayes 3-7, Miller, Scandia Model SSU1 Wrappers. Hudson Sharp Campbell Auto. Cellophane Wrapper. This is Only a Partial List. Tell Us Your Requirements. Union Standard Equipment Company 518-322 Lafayette Street New York 12, N. Y.

FOR SALE: New and slightly used wrapping machines. Real values. We have Corley-Miller, Oliver and Hayes machines in fine condition. They wrap with cellophane, waxed paper, kraft papers, and other common wrapping materials. Uses practically unlimited. Heat sealing or cold gluing. Write P. O. Box 3368, Chicago, Illinois.

FOR SALE

OPERATING ROTOGRAVURE PLANT, including cylinder making facilities, with 500 cylinders suitable for re-stamping. All Champlain presses complete with variable speed drives, etc. 1-5 color, 14", with sheet cutting equipment, slitter and rewinder, 1-4 color, 14", with reverse coater attachment, 1-5 color, 9", All 1-2 color, 14", experimental laboratory press. Miscellaneous equipment includes 30" Lawson cutter, 30" and 40" Langston & Cameron slitters, waste baler, machine shop, high pressure steam boiler, air conditioner, etc. Building and yard approximately 250 sq. ft. including outside fireproof ink storage building. Building available for purchase or lease. Very low. Corporation with substantial tax loss also available. Can be seen by appointment. Box 432, Modern Packaging.

FOR SALE: Paper sheeter, Peters. Range: maximum 24" width, 28" length with predetermined capacity, approximately 75,000 lb. per hour. Slitter 40" width shafts for 1" & 3" dia. cores with automatic stop, cutters and motor \$400.00 F.O.B. New York. The machines are in excellent condition. Inspection by appointment. Box 437, Modern Packaging.

SALES REPRESENTATIVE: Old established manufacturer of metal closures and closure specialties has position for representative covering Pennsylvania and South Jersey. Substantial business now being booked in this territory. Excellent opportunity for man handling one or two allied packaging lines. Box 438, Modern Packaging.

HELP WANTED

MANUFACTURER'S REPRESENTATIVES: Wanted by polyethylene liner and bag concern. Exclusive territories available. New York, Chicago, and others. Will turn over present customers to qualified representatives. Interested particularly in men calling on chemical, food, and allied industries. Give details of lines currently handled, territory covered, etc. Box 423, Modern Packaging.

PACKAGING ENGINEER: Leading company in the field of pharmaceutical and drug manufacturing has a position open for a well-qualified packaging engineer. Midwestern location. This is a career opportunity. Salary based on experience and training. Give full particulars in first letter. Replies held in strict confidence. Box 435, Modern Packaging.

WANTED: Paper manufacturer in Middle West, having cylinder machines, wants at once, man familiar with laminating to direct operations and also sell output of latest 60" laminating machine. Can paste board to board or paper to board. Excellent opportunity for right person. Box 426, Modern Packaging.

SALES REPRESENTATIVE: Territories open for men with established following in industrial packaging field. Leading fabricator in electronically sealed vinyl specialty packages (kite rolls, pouches, cans, and bags) seeking a position on commission basis. Excellent opportunity with profitable future. Reply in detail giving lines currently handled and territories covered. Box 436, Modern Packaging.

MISCELLANEOUS

SALESMEN: We are converters and printers of Cellophane, Polyethylene, Glassine, etc., in the form of bags, envelopes, rolls and sheets. No objection to carrying sidelines. In reply please state age, past experience, territories covered, etc. All replies kept strictly confidential. Box 439, Modern Packaging.

WANTED: Plastic scrap and rejects in any form. Cellulose Acetate, Butyrate, Polystyrene, Vinyl Polyethylene, etc. We pay top prices for clear, colored and printed scrap in any quantity. Box 425, Modern Packaging.

SALES REPRESENTATIVE: Large producer of polyethylene tubing and sheeting is seeking representatives on commission basis to solicit transparent film to converters and other industrial users. Give age, past experience, proposed area to be covered, enclosed snapshot with application, present lines carried. Reply Director of Sales. Box 430, Modern Packaging.

WANTED: Cellophane Wrapping Machine. Model FA-3 Package Mach. Co. or equivalent to wrap packages of gift wrap paper folded to size 10 x 10. Box 433, Modern Packaging.

PACKAGING AND DISPLAY DESIGNER: Top creative house wants first-rate idea man to work on national accounts. Must be able to initiate and develop ideas for packages, merchandising aids, and displays of sales displays made of all materials. Must have similar experience and do good visuals and comprehensions. Location: commuting distance from N.Y.C. Excellent opportunity. Box 431, Modern Packaging.

GLASSINE BAG MACHINE WANTED: Bag print model #24-A or B-10 with printer. Advise price and complete information for immediate sale. Box 434, Modern Packaging.

WANTED: Plastic Scrap—Cellulose Acetate and rigid vinyl sheet scrap in any quantity. Also Polystyrene Acetate, Butyrate molded rejects, scrap and excess molding powder inventories. Box 427, Modern Packaging.

All classified advertisements payable in advance of publication

Up to 60 words.....	\$10.00	Up to 120 words.....	\$20.00	Up to 180 words.....	\$30.00
Up to 60 words (boxed).....	\$20.00	Up to 120 words (boxed).....	\$40.00	Up to 180 words (boxed).....	\$60.00

For further information address Classified Advertising department, Modern Packaging, 575 Madison Ave., N. Y. 22, N. Y.

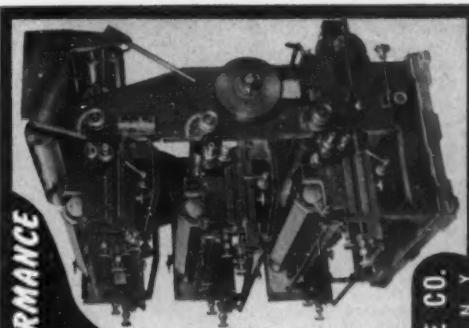


*Break Through Competition
with WEINMAN Transparent
Plastic Containers!*

The EASY way to create every-day sales punch! If it's VOLUME you want for '53, try these sales "pepper-uppers" in your packaging plans.

Write for samples, catalog and prices.

Weinman Brothers, Inc.
MANUFACTURERS
3260 W. GRAND AVE., CHICAGO 51

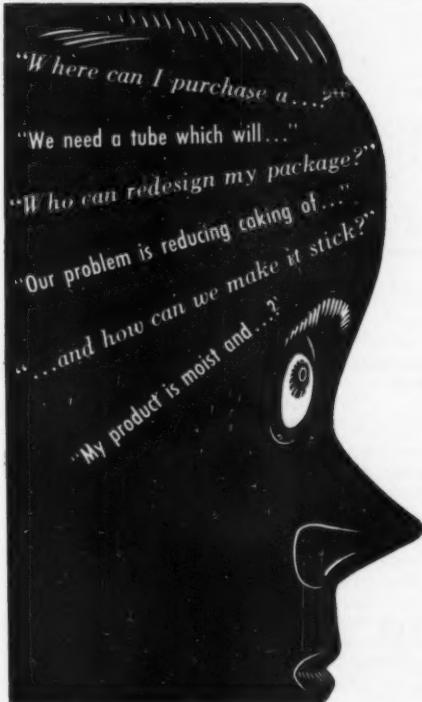


FIRST CHOICE FOR PERFORMANCE
MANHASSET 3 COLOR PRESS —

For Quality control of ink and unexcelled performance there is no second choice to Manhasset. Complete with Rewinder and Slitter. Of rugged construction, you are assured continuous, smooth operation. Made in 18, 24, 30, 36, 42, 48". Rewinder and Slitter made in 18, 24, 30, 36, 42, 54, 60" with water cooled cylinders.

Ask for descriptive folders on this machine.

MANHASSET MACHINE CO.
255 EAST 2nd STREET, MINEOLA, N. Y.



Each month, the Readers' Service Department of MODERN PACKAGING answers scores of questions for our readers. Questions range from simple requests for information about the manufacture of a can, machine or box to requests which demand detailed, technical answers.

With their extensive files, reference library and wide knowledge of packaging materials, machinery and procedures, the members of the Readers' Service Department can usually supply the information you request. In addition, the technical and editorial staffs of MODERN PACKAGING are at their disposal for attending to questions which are particular "sticklers."

If you have any questions, feel free to forward them. There is no charge or obligation for this service. Address—Readers' Service Department, MODERN PACKAGING. A complete reply to your inquiry will be sent promptly.

MODERN PACKAGING

A BRESKIN PUBLICATION

575 Madison Avenue

New York 22, N. Y.

INDEX OF ADVERTISERS

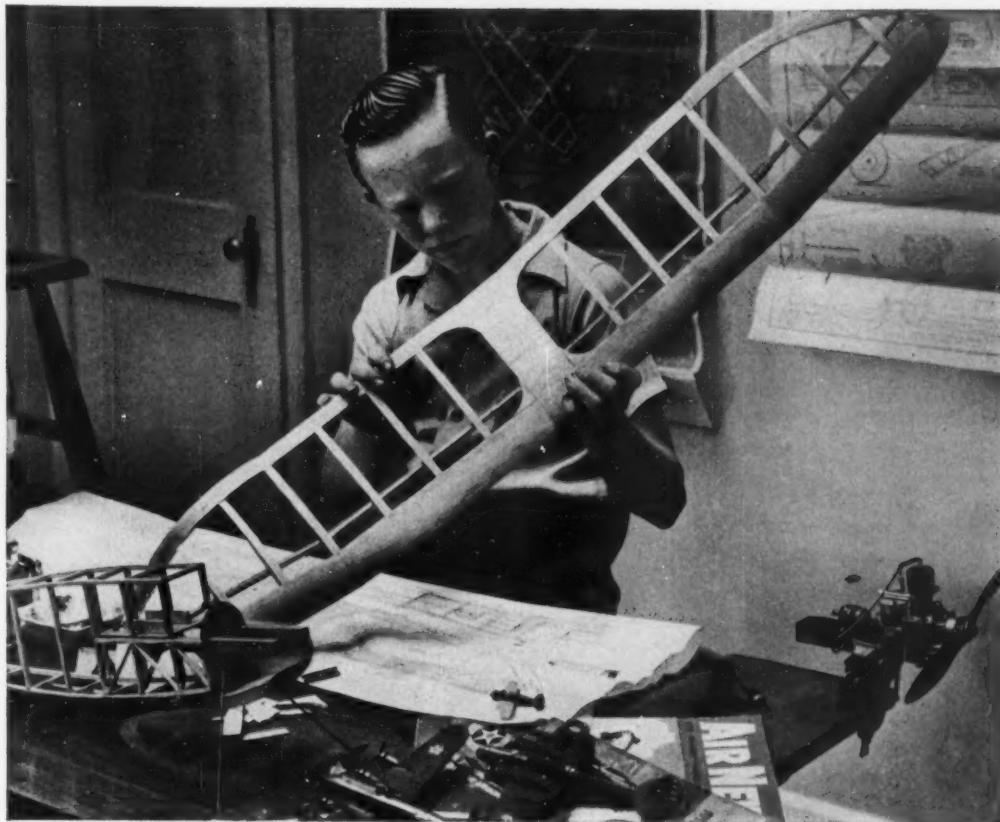
NOVEMBER 1952

Acme Backing Corp.	15	Gaylord Container Corporation	47	Oliver Machinery Company	198
Aluminum Company of America	9, 149	Globe Heat-Seal Inc.	153	Owens-Illinois Glass Company	194, 195
American Can Co.	44	Goodrich, B. F., Chemical Company, The Geon Division	7	Owens-Illinois Glass Co., Kimble	
American Coating Mills Corporation	30	Goodyear Tire & Rubber Company, The, Pliofilm Dept.	122, 123	Glass Division	152
American Cyanamid Company, Plastics Department	205	Gottsch, Adolph, Inc.	166	Oxford Paper Company	10
American Viscose Corporation, Sylvania Division	161	Green Bay Tissue Mills	168		
Anderson Bros. Mfg. Co.	186	Gumm Products Company, The	25		
Andrews, P. L., Corp.	150	Hagerty Bros. & Co.	168	Package Machinery Company	134
Angier Corporation	196	Hayssen Mfg. Company	72	Paisley Products Incorporated	36
Arkell and Smiths	65	Hazel-Atlas Glass Company	59	Pak-Rapid Inc.	192
Bartelt Engineering Company		Heekin Can Co., The	18	Paper Machinery & Research, Inc.	178
Beck, Charles, Machine Corporation		Heinrich, H. H., Company	191	Paterson Parchment Paper Company	54
Bemis Bag Company	80	Hesser, Fr.	27	Peter Partition Corp.	209
Bensing Bros. and Deeney Sales Company	55	Hinde & Dauch	163	Peters Machinery Company	148
Bernardin Bottle Cap Company, Inc.	212	Holes, Floyd A., Co., The	16	Pneumatic Scale Corp., Ltd.	83
Black-Clawson Co., The, Dilts Machine Works Division	45	Howard Plastics	177	Potdevin Machine Co.	208
Braun, W. Co.	177	Hudson-Sharp Machine Co.	202		
British Cellophane Limited	71	Industrial Packaging Co., Inc.	38	R. C. Can Company	197
Brown Bag Filling Machine Co., Inc.	201	Inta-Roto Machine Company, Inc.	186	Rapid Cutting Co., Inc.	180
Brown Company	22	Interchemical Corporation, Printing Ink Division	26	Rayon Processing Co. of R. I., Inc.	154
Burt, F. N., Company Inc.	133	International Staple & Machine Company	6	Redington, F. B., Co.	3
Calmar Company	14	Kidder Press Company, Inc.	157	Reeves Brothers Inc., W. Harris	
Cameo Die and Label Company	179	Kimberly-Clark Corp.	78	Thurston Division	200
Cargo Packers Incorporated	198	Kimble Glass Division, Owens-Illinois Glass Company	152	Resina Automatic Machinery Co., Inc.	176
Celanese Corporation of America	76	Koppers Company, Inc.	21	Rexford Paper Company	166
Celluplastic Corporation	203	Lembo Machine Works, Inc.	172	Reynolds Metals Company	12, 13
Central States Paper & Bag Co.	27	Lerner Plastics, Inc.	208	Riegel Paper Corporation	82
Champion Paper and Fibre Company, The	39-42	Lowe Paper Company	32	Ritchie, W. C., and Company	66
Champlain Company, Inc.	46	Lusteroid Container Company, Inc.	190	Robertshaw-Fulton Controls Company	204
Chaspeau Manufacturing Company, The	187	Mack Molding Company, Inc.	168	Roto Bag Machine Corp.	213
Chester Packaging Products Corp.	50	Manhasset Machine Co.	215	Rowell, E. N., Co., Inc.	77
Chisholm-Ryder Company of Pa.	186	Manufacturers' Literature	169, 170	Scandia Manufacturing Company	178
Claremont Waste Mfg. Company	201	Markem Machine Company	201	Schaefer Machine Co.	180
Clark-Aiken Company, The	189	McLaurin-Jones Co.	164	Seal & Label Institute	60
Classified	214	Mead Board Sales, Inc.	217	Seal Spout Corp.	210
Cleveland Container Co., The	81	Mercury Heat Sealing Equipment Company	173	Sefton Fibre Co. Company	52
Consolidated Packaging Machinery Corp.	184	Michigan Carton Co., Inside Back Cover	181	Shellmar Products Corporation	Back Cover
Continental Can Company	174	Middlesex Paper Tube Co., Inc.	181	Sorg Paper Company, The	147
Creators Art Service	175	Miller, Walter P., Co., Inc.	43	Standard Printing Company	33
Cromwell Paper Company	62	Mills, Elmer E., Corporation	17	Steigerwald, A. M., Company	75
Crown Can Company	70	Milprint Inc.	63	Stokes & Smith Co.	58
Crown Cork & Seal Company	24	Minnesota Mining & Mfg. Co.	28	Stuyvesant Engineering Company	179
Crown Cork Specialty Corp.	165	Monsanto Chemical Company, Organic Chemicals Division	23	Sun Tube Corporation	56
Crystal Tube Corporation	156	Monsanto Chemical Co., Plastics Division	218	Sylvania Division, American Viscose Corporation	161
Dennison Manufacturing Co.	19, 20	Moistype Corporation	209	Technopol Laboratories Limited	171
Dexter Folder Company	192	MRM Company, Inc.	193	Triangle Package Machinery Co.	160
Dilts Machine Works Division, The Black-Clawson Co.	45	Nashua Corporation	84	Tri-State Plastic Molding Company	11
Dobbeckman Company, The	5	National Starch Products, Inc.		Tupper Corporation	183
Doughboy Industries, Inc.	181	Inside Front Cover			
du Pont de Nemours, E. I., & Co. (Ine.), Cellophane	34, 35	Newark Paraffine & Parchment Paper Co.	61	Union Bag & Paper Corporation	53
du Pont de Nemours, E. I., & Co. (Ine.), Polychemicals	145	Nichols Paper Products Company	187	U. S. Automatic Box Machinery Co., Inc.	64
Eastman Kodak Company	151	Ohio Boxboard Co., The	57	Vanant Products	68
Economic Machinery Company, Division of Geo. J. Meyer Manufacturing Co.	211	Old Dominion Box Company, Inc.	51	Venesta Ltd.	69
Egan, Frank W., & Company	8	Olive Can Company	155	Visible Package Sales Corp.	172
Elgin Manufacturing Company	172			Visking Corporation, The	158, 159
Empire Box Corporation	199			Vichell Tool Company, The	79
Ever Ready Label Corp.	177			Walton Laboratories, Inc.	185
Fairest, Morgan, Ltd.	58			Warner Brothers Company, The	29
Fisher's Folds Ltd.	73			Waxed Paper Institute, Inc.	206, 207
Frazier & Son	181			Weinman Brothers, Inc.	215
Gair, Robert, Company, Inc.	1			Wolverine Paper Converting Machinery Corporation	184
Gardner Board & Carton Co., The	48, 49				

*Modern
packaging*

Published by Modern Packaging Corp.
575 Madison Avenue, New York 22, N.Y.

A BRESKIN
Publication



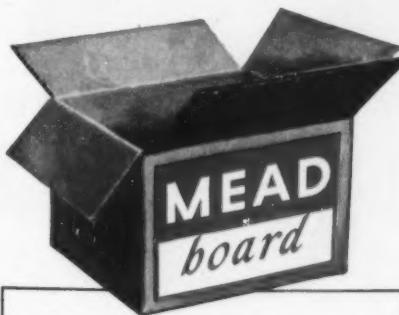
The Model-Making Hobby Becomes Big Business

From a standing start a few years ago the model-making hobby has been ridden by an ever-growing army of enthusiasts to an annual outlay of better than \$50,000,000.

Men, women, boys and girls of all ages are eagerly assembling the prefabricated pieces of such items-in-miniature as trains, airplanes, ancient motor cars, ships, stagecoaches, circuses and covered wagons. And some 130 of the manufacturers catering to these fanatic whittlers and gluers belong to their own trade organization, the Model Industry Association.

Just as balsa—because of its lightness, strength and ease of manipulation—is the principal material used in model making, so are corrugated cases and fiberboard cartons the principal containers carrying the models to market. One hobby shop owner said he couldn't remember when he last saw his merchandise arrive any other way.

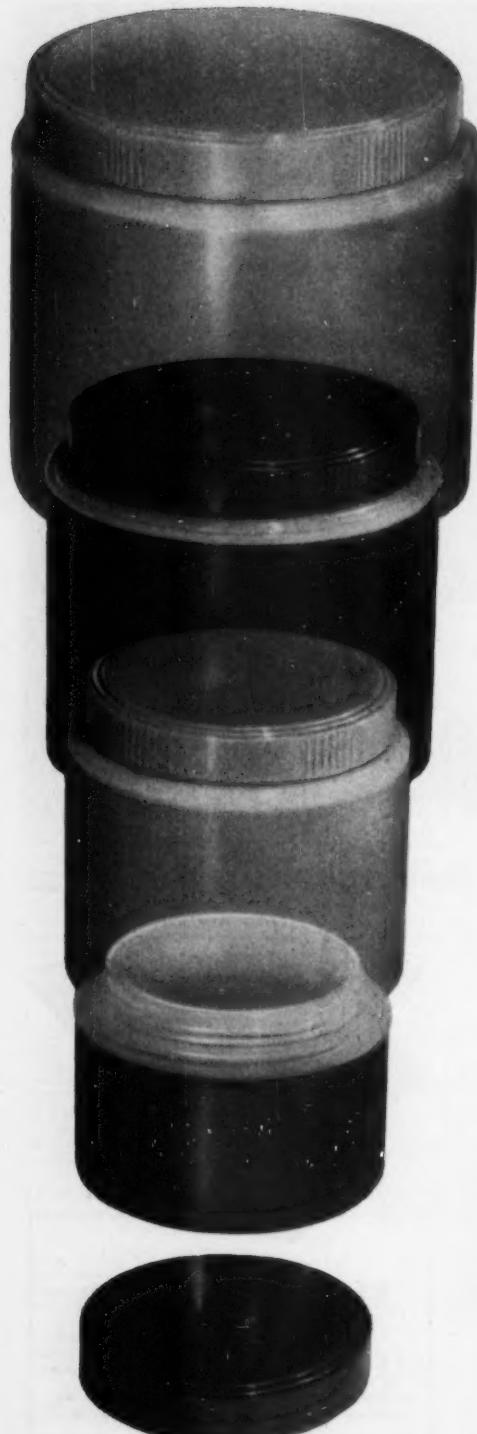
Yes, rigidity, strength, easy handling—these are the qualities that make MEAD .009 Chestnut Corrugating and MEAD Kraft Liner Board popular materials for the cases and cartons that deliver over \$50,000,000 of model kits annually to the hobby shops of America. Made extra strong with chestnut and other hardwood fibers, MEAD Board provides all the protection shippers want, with all excess packing weight left off.



MEAD Board is sold direct by

**MEAD BOARD
SALES, INC.**

3347 Madison Road, Cincinnati 9, Ohio
NEWARK 2, N. J. LYNCHBURG, VA. CHICAGO 6, ILL.
786 Broad St. 205 W. Wacker Drive



Make more money...by spending less

With packages molded
of sales-appealing LUSTREX

Something new in packaging are these attractive cosmetic jars . . . molded completely of Lustrex styrene for glamour packaging at low cost.

Molded by Colt's Manufacturing Company of Hartford, Connecticut, and already being used by several leading cosmetic concerns, these low cost stock jars of Lustrex are available in four popular sizes (1, 2, 4 and 8 ounce) and a wide range of pastel colors.

Sales appeal and low cost are most important, of course. But Lustrex has still other important advantages:

- light in weight . . . for easy and economical handling and shipping
- smooth and sturdy . . . will not chip, peel or crack
- tasteless and odorless . . . non-toxic
- unaffected by common acids and alkalies, most solvents.

Before *you* choose a package, it'll pay you to thoroughly investigate stock packages of Lustrex. Why not write Monsanto today for full information. The coupon below is for your convenience. Lustrex: Reg. U. S. Pat. Off.

MONSANTO CHEMICAL COMPANY, Plastics Division.

Please send me new management report on plastics for packaging.
 Please send me information on low cost stock packages of 1 Litres.

Name & Title _____

www.ijerpi.org | 100





It takes skill to achieve
THAT CLEAN LOOK!



That "clean look" typical of all Michigan cartons, results from the most skillful, careful workmanship, all through production. We make our own paperboards, in our own mills. Inks are laboratory-tested. Color plates are registered to split-dot accuracy. Press work is continuously and vigilantly checked. All to assure you of the best-looking, most effective selling cartons for your high quality products.

MICHIGAN CARTON CO. • BATTLE CREEK, MICHIGAN

AMERICA REACHES FOR ***Michigan*** CARTONS



CELLOPHANE ENVELOPES AND SHELL-PLI® BOX COVERS • CELLOPHANE BAGS
CELLOPHANE OVERWRAPS • SHELLINE SNAP-SACKS® • LIQUID FILM POUCHES
ACETATE WRAPPERS • ACETATE-FOIL WRAPPERS • BUBROFOL® WRAPPERS

There's always a Shellmar package to do the job best!

Whatever the product, whatever the packaging material, you'll find Shellmar can provide the practical solution to your packaging problem quickly and economically.

Successful Package Creations from Shellmar are the perfect combination of the *right* packaging material, the *right* design, the *right* colors, the *right* printing . . . and *superb workmanship*. No wonder so many leading processors and manufacturers call on Shellmar for all of their packaging needs.

Your Shellmar Packaging Counselor is a good man to know. Whether you're looking for a new merchandising package or wondering how to improve your present one, talk over your problem with him soon!

Shellmar Products Corporation • Mt. Vernon, Ohio



Plants:
Mt. Vernon and
Zanesville, Ohio,
South Gate, Calif.
Columbus, Ga.
Mexico City,
Medellin, Colombia,
Sao Paulo, Brazil